

Modern

LITHOGRAPHY

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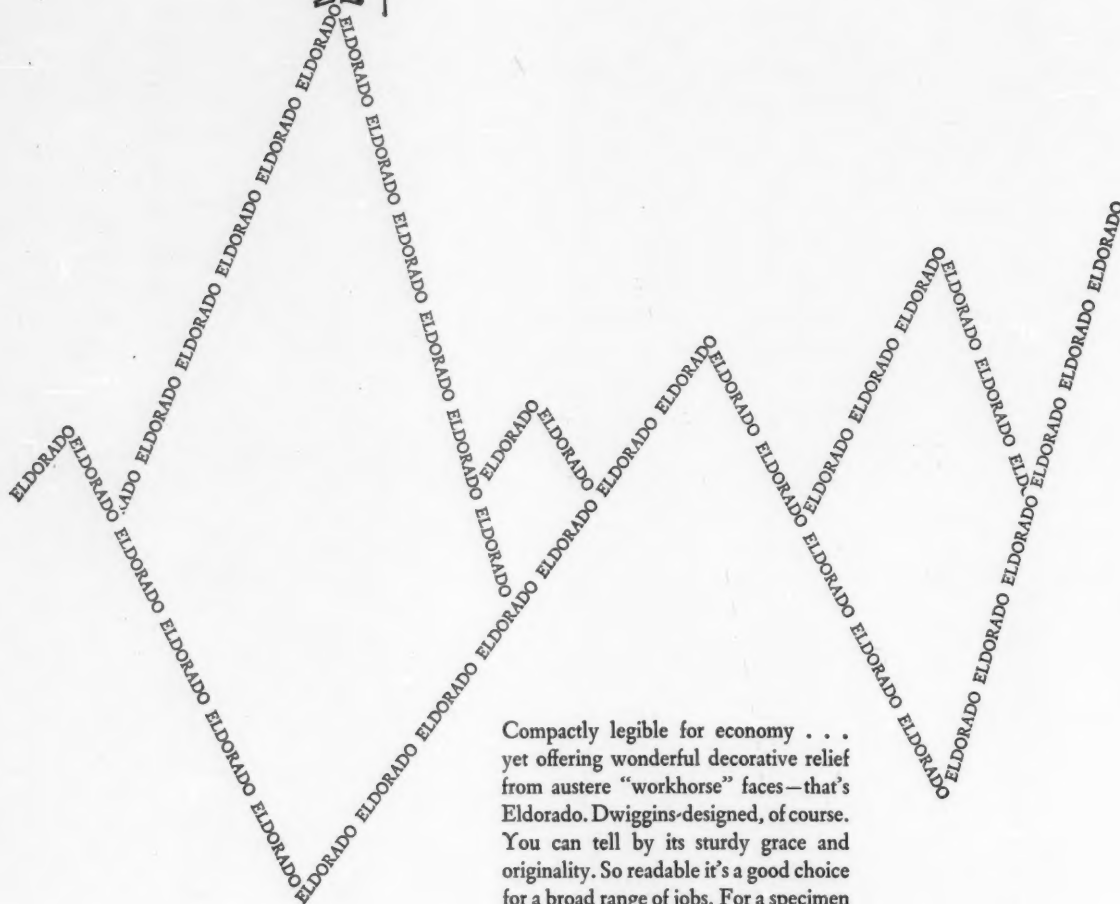
In this issue

Art and Copy
Printing Week News
Quality Control (II)
Half-tone Ratios
Offset Encyclopedias
Calendar Photos

JANUARY, 1958



Eldorado



Compactly legible for economy . . . yet offering wonderful decorative relief from austere "workhorse" faces—that's Eldorado. Dwiggins-designed, of course. You can tell by its sturdy grace and originality. So readable it's a good choice for a broad range of jobs. For a specimen showing all sizes, write Mergenthaler Linotype Company, 29 Ryerson Street, Brooklyn 5, N. Y.

• LINOTYPE •

It's Roberts & Porter's

brand new

silver gray blanket!

It will give *your* offset:

Brighter colors, more sparkle.
Richer, deeper, more opaque colors.
Sharper halftones, cleaner, fresher type.

It will give you:

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Faster recovery from smash.
Greater resistance to "setting,"
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It's new — brand *new* !

Try it. Lithographers who have, swear
by it. Give new life, new sparkle,
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economy to your offset — today!

Order Roberts & Porter's new Silver Gray
Offset Blanket now—from the branch nearest you.

Three-ply or four-ply. For paper,
coated or uncoated, or metal.

ROBERTS & PORTER
Incorporated



WHAT'S HE PUTTING INTO THIS VIOLIN THAT HELPS YOUR PRINTING HIT THE RIGHT NOTE?

WHAT'S in a fine violin that helps give it a brilliant tone—a more beautiful look? Hardwood! What's the secret of making finer bond paper? Hardwood—if you know how to use it. And Hammermill does with an exclusive hardwood pulp called Neutrancel®.

Hammermill's Neutrancel unlocks the secret of hardwood to give Hammermill Bond greater opacity—give your printing better contrast, a crisper look. It

helps you produce better-looking letterheads, enclosures, business forms. Neutrancel blends with other quality pulps to knit all the fibers together more closely—smooth out the tiny "hills and valleys" you find on the surface of most papers. It gives Hammermill Bond a velvety, more level printing surface than was ever possible with softwoods alone. It makes good printing look even better.

And Neutrancel helps make printing on

Hammermill Bond easier to sell. There's greater strength and bulk; neater folding, too. Neutrancel increases the important snap and feel that says quality. It's the best, cleanest Hammermill Bond ever.

Ask your Hammermill salesman to show you samples of new Hammermill Bond with hardwood's finer fibers. You'll like it. So will your customers. Hammermill Paper Company, Erie, Pa.

Ask for

**HAMMERMILL
BOND**

with Neutrancel's finer fibers



Cover

Once again it's time to tell the general public what we do and how we do it. In every major city in the United States, Jan. 12-18, local printing and lithographing groups, including the Litho Clubs, are co-operating to explain, through Printing Week observances, the importance of our industry to the nation's economy. Roundup story starts on page 44.

WAYNE E. DORLAND
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MODERN LITHOGRAPHY

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JANUARY, 1958

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**new wash-up solvent formula
prevents scale formation**

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Ask for a sample. It must be good . . . developed by Knox laboratory people who know lithography. To help solve your problems, they're synthesizing chemicals other labs haven't heard of yet.

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SUPER SOLVENT**
FOR CLEANING LITHOGRAPHY MACHINES



All this . . . and no increase in price. Available in 1 and 5 gallon cans, 55 gallon drums.



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NEW WHITENESS !
NEW BRIGHTNESS !

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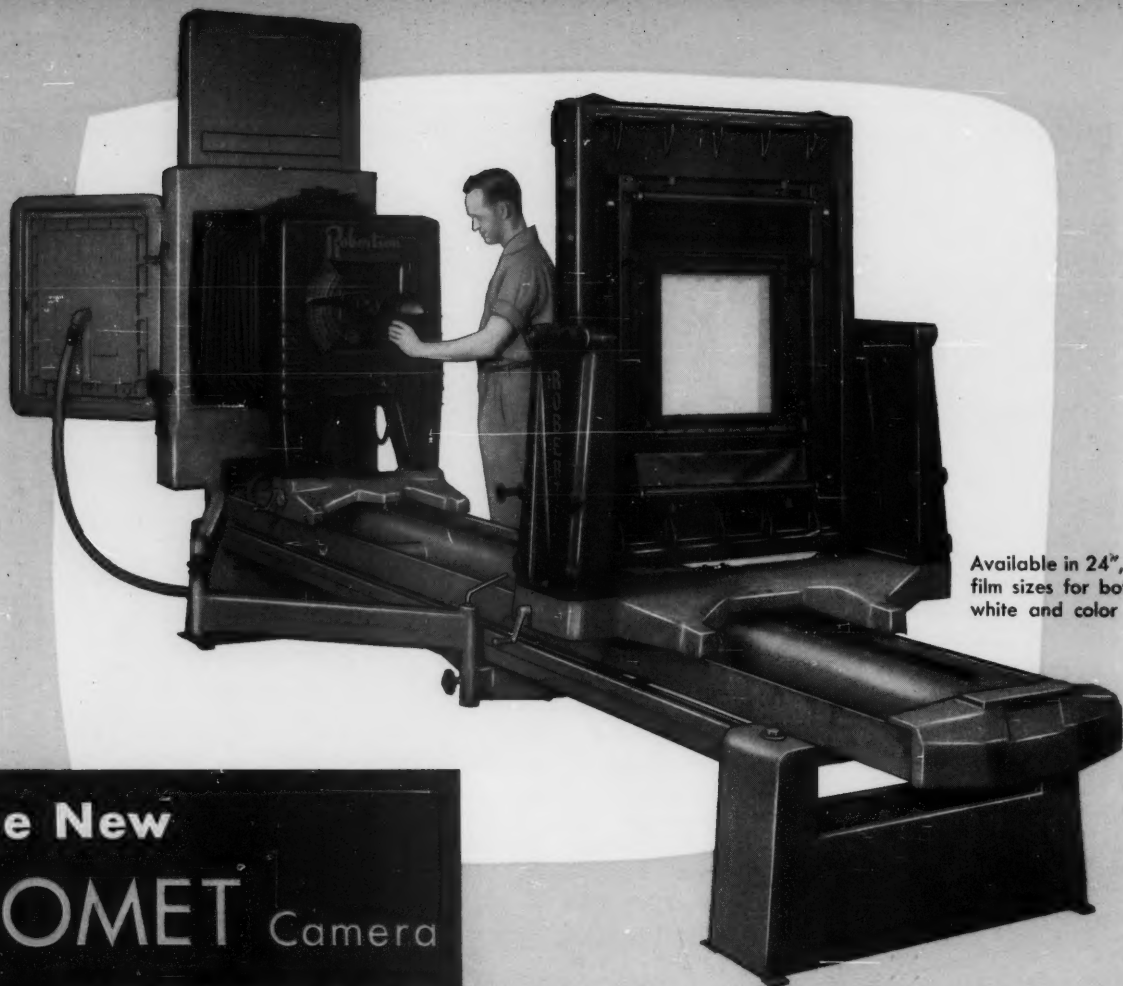
OFFSET

Our new chlorine dioxide bleach plant now assures the whitest, brightest offset paper obtainable. Look at Nekoosa Offset . . . try it! Your Nekoosa Paper Merchant has samples!



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Mills at Port Edwards and Nekoosa, Wisconsin, and Potsdam, New York



Available in 24", 31" and
film sizes for both black
white and color reprodu

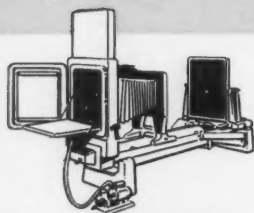
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**Satisfies your needs Today.....
anticipates your needs of Tomorrow**

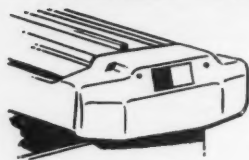
Never before have you been offered a heavy duty, all metal precision camera of such versatility and superior performance equipped with the most modern photo-mechanical advancements—pre-planned to satisfy the diversified requirements of your future needs. Here is the camera for fulfilling the exacting requirements of your present needs that provides features for increasing your productivity as you expand. Available in either Manual Cable Drive with ball bearing movement, or Electric Screw Drive with vernier dials reading in 1/000ths of an inch.

Ask your dealer for complete details and prices or write Robertson for Bulletin No. KM-241.

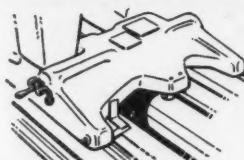
FEATURES THAT WILL FULFILL YOUR NEEDS FOR THE FUTURE



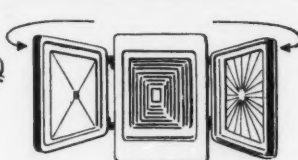
Sturdy all metal UNI-CELL CONSTRUCTION insures positive rigidity and absolute parallelism—today, and years in the future.



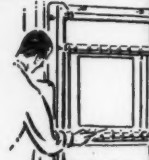
Heavy-duty TRACK combines a one-piece steel tube with a conventional bi-rail track, machined and planed as a single unit to prevent torque and twisting.



Sealed in oil, BALL BEARING MOVEMENT guarantees faster setting, ease of operation and longer wear with no maintenance.



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A complete line of photo-mechanical equipment
ROBERTSON PHOTO-MECHANIX, INC.
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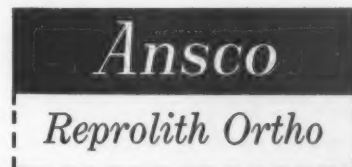
The toughest man in the shop

Good quality control men are always tough. And there is a sure way to tell a good man from an indifferent one—it's how hard he fights for the absolute best in reproduction. And, as every good graphic arts man knows, there's no substitute for the right film for the particular job at hand.

Take Ansco's Reprolith Ortho Type B for example. Here is a film that is equally suitable for line or halftone work, and it gives critically clean images that are completely neutral in color.

Ansco's Reprolith Ortho Type B film also handles color copy with a brilliant tonality that is hard to match!

And when used with Ansco's superb Reprodol Developer and Ansco's Acid Fixer with Hardener, Reprolith Ortho Type B becomes the natural choice of the tough men in the shop! Ansco, Binghamton, New York. A Division of General Aniline & Film Corporation.





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MOISTURELESS, SELF-STICKING ADHESIVE

To sell extra printing, you have only to harness the selling power of KLEEN-STIK and you team up with the "work-horse" of effective P.O.P. Manufacturers, distributors . . . advertisers of all types of products appreciate the added benefits of this pressure-sensitive stock that performs miracles at the point of sale!

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KLEEN-STIK is available in a
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Don't let your sales slip away!
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Whether you designed your business
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and keep you up!



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product — KLEEN-STIK will get
your message across!



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easy, there's no need to go —
just roll and press — no water, glue,
or heat needed!



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Emphasize your products with more
attention because they win more
and better locations — get posted where
other displays don't.



**SOLID KLEEN-STIK
ADHESIVE**



STRIPS & SPOTS



FACE-STIK



**3-DIMENSIONAL
DISPLAYS**



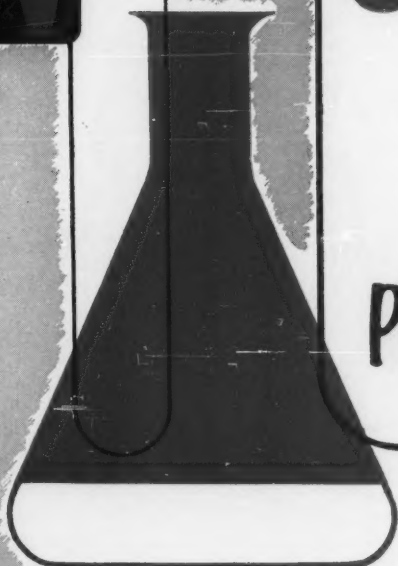
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PACKAGE LABELS**

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SINVALCO DEEP-ETCH SOLUTION #26 offers a smooth, controlled etching action which leaves the image bright and in condition to firmly retain the copper. Especially designed for copperized aluminum plates, it guarantees faithful reproductions on long runs.

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SINVALCO

Chemicals

The Litho-Chemical Division of

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when you think of

chemicals

supplies

film

equipment

think of
PITMAN

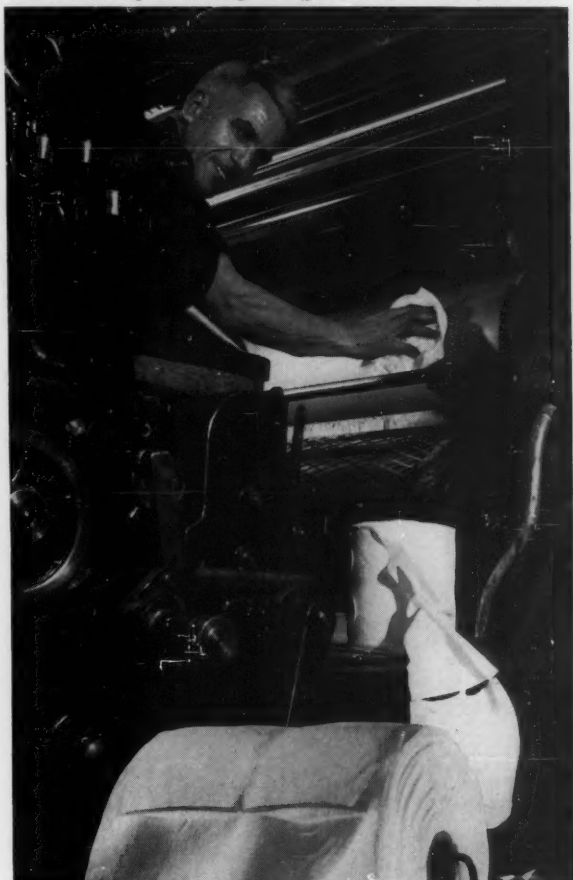
When you call Pitman for all your graphic arts needs, you can depend on prompt and efficient service. Large stocks of essential materials are on hand at all times, to assure you of prompt delivery.

For fifty years, Pitman has been a leading supplier of chemicals, equipment, film and all graphic arts supplies. Call the Pitman office nearest you . . . for all your requirements from a single, dependable source.

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266 Summer Street

Andy Leverone "washing up" with Webril Wipes
at Winthrop Printing & Offset Co., Boston, Mass.



WEBRIL®
NON-WOVEN FABRIC
WIPES
PATENTED

REMARKABLE NEW PRINTING-ENGRAVING WIPING MATERIAL

Try it FREE!

Webril Wipes are designed specifically for graphic arts use. They won't scratch the most delicate surface and they're lint free. Made of high grade cotton fibres, interlocked rather than woven together, they provide a totally new, improved type of wiping material. Each roll perforated into one hundred 8" squares for easy, economical dispensing.

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- **ROLLER CLEANING** — *keeps the mess off you, whisks ink away fast, efficiently.*
- **GLASS WIPING** — *fine for cleaning screens, lenses, etc.*

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or write for free samples

THE **KENDALL** COMPANY

Kendall Mills Division, Dept. ML-18, Walpole, Mass.

I'd like to try Webril Wipes — free. Please send me samples for testing.

Name

Company

Address

City State

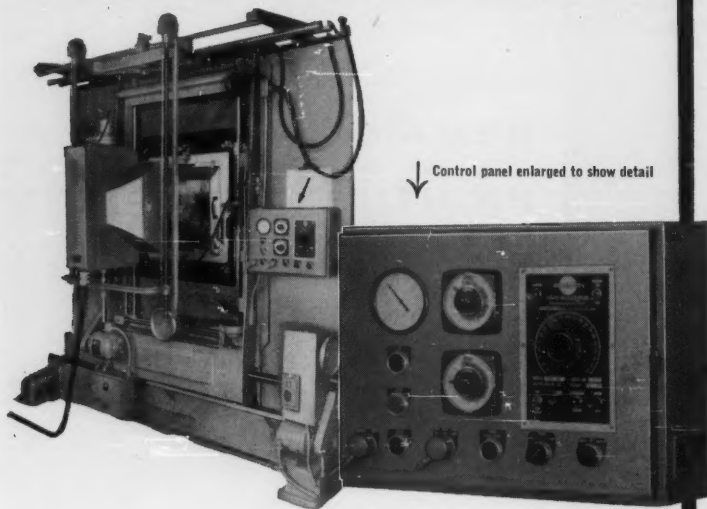
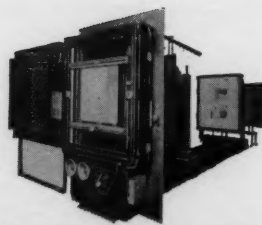
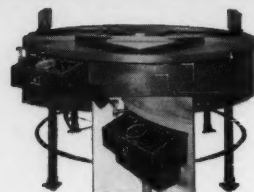


Photo-Composing Machine (Step and Repeat)—with new *Automatic Sequence Control*. Used by the vast majority of leading lithographers. Features: exact registration, fast and simple by automatic operation; micrometer precision to .001 for accuracy and speed; accessibility and safety from errors.

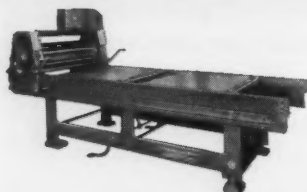


New Precision Color Camera—Rutherford cameras of this type are fully power operated and require no visual focusing. Lens board and copy board are set by micrometer dials. Other features include: structural steel base with vibration-absorbing mounts, removable glass-covered board and 2-piece wood copy board, interchangeable lens, plus many others.

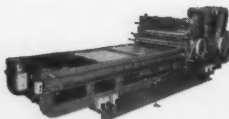


Rutherford Plate Whirler—provides uniform distribution of albumen or deep-etch coating solution. A compact gear reduction unit applies power to the plate; friction and belt drives have been eliminated.

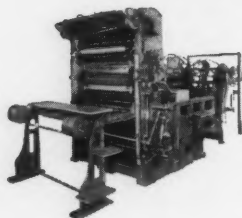
When should you invest in new plate making equipment?



Offset Color Proving Press



Automatic Inking and Dampening Proof Press



Metal Decorating Press

The answer is:
when you are already paying for it.

Shops that rely on obsolete equipment are already paying for new plate making equipment . . . without getting the use and advantages of new equipment. They're paying in slow production, poor results, down-time and wasted materials . . . day-after-day losses that quickly add up to the cost of new machines.

Only a careful cost analysis can tell you whether you are losing or making money on your photo-comp and camera or plate room equipment. And only complete information on the latest design and manufacturing advances can show you *how efficient your operations ought to be.*

for more information, write:



Rutherford Machinery Company

Division

Sun Chemical Corporation

10th Street & 44th Avenue, Long Island City 1, N. Y.
Chicago • Toronto • Montreal • San Francisco

3 tried and proved CHEMICALS

FOR BETTER RESULTS WITH PRE-SENSITIZED OFFSET PLATES

IMPERIAL FOUNTAIN SOLUTION (Concentrate)

Here's the standard favorite fountain solution for over 25 years! "Imperial" desensitizes the non-printing areas, and keeps the plate tint free without harm to the image. "Imperial" can also be used as a plate etch on the press! It's economical too! One gallon of "Imperial" makes up to 256 gallons of etch. Complete directions with each bottle.

	1 quart..... \$ 2.00	
12 gals., per gal.....	\$ 6.30	1 gallon..... \$ 7.00

LITH-KEM-KO GUM SOLUTION

Lith-Kem-Ko Gum solution has gained wide acceptance for use in the water fountain and as a plate preservative. When diluted with more than twice its volume of water, it prevents oxidation on pre-sensitized plates before and after press runs. Produced from the highest grade gum arabic crystals available, it contains no fillers whatever and is absolutely preserved against souring.

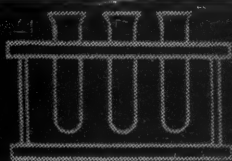
1 quart..... \$ 1.00	15 gallon drum, per gal..... \$ 2.40
1 gallon..... \$ 3.00	30 or 54 gallon drum, per gal..... \$ 2.00

IMPROVED **DUMORE** ASPHALTUM SOLUTION

Improved "Dumore" Litho Asphaltum is the perfect chemical for washing-out and preserving pre-sensitized plates. Its use has proven invaluable in plateroom or on the press. It provides a moisture proof coating during storage and retains the ink receptivity of the printing image. Compare its quality and price with others you have used.

1 quart..... \$ 1.15	1 gallon can or 4 Qt. cans..... \$ 3.50
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Dumore prices slightly higher on West Coast.

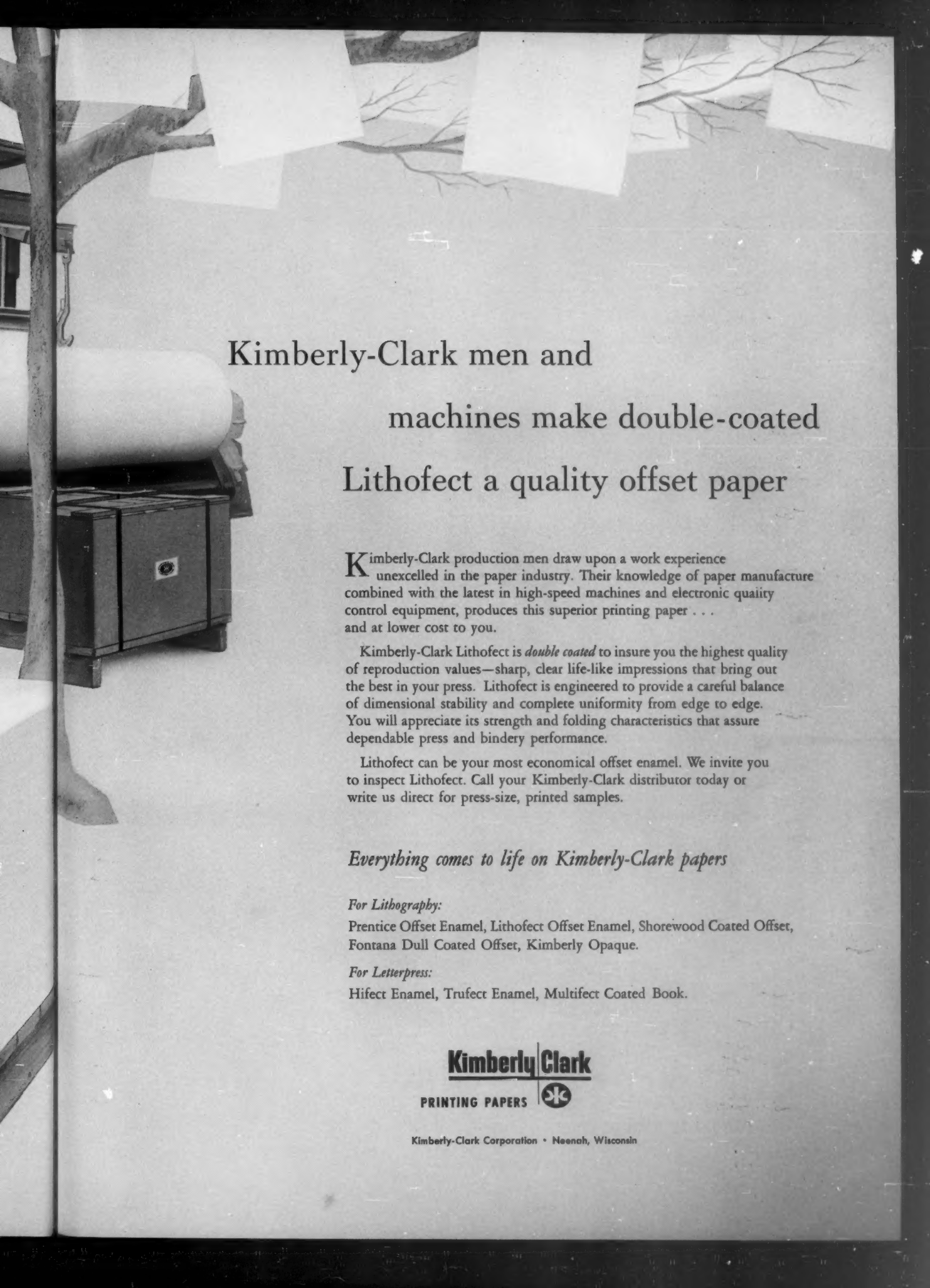


LITHO CHEMICAL
& SUPPLY CO., Inc.



46 HARRIET PLACE - LYNBROOK L. I. NEW YORK
1506 SANTA FE AVE. LOS ANGELES, CALIFORNIA





Kimberly-Clark men and machines make double-coated Lithofect a quality offset paper

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Lithofect can be your most economical offset enamel. We invite you to inspect Lithofect. Call your Kimberly-Clark distributor today or write us direct for press-size, printed samples.

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For Letterpress:

Hifect Enamel, Trufect Enamel, Multifect Coated Book.

Kimberly Clark

PRINTING PAPERS



Kimberly-Clark Corporation • Neenah, Wisconsin

Chemistry applies its wisdom to AQUATEX-DAMPABASE

... giving you better-controlled water distribution on your dampening rollers, longer covering service life.



The secret chemical treatment through which we put Aquatex and Dampabase roller coverings means a lot to you:

1. It smooths out the threads and makes it difficult for bits of lint and dirt to be attracted to the dampened coverings;
2. It makes seamless Aquatex and Dampabase highly water-retentive, yet allows them to release their moisture easily and evenly to the lithographic plate surface;
3. It keeps Aquatex and Dampabase smooth on the roller, eliminating the annoying creep and wrinkle that cut down roller and plate life.

INSIST on genuine Aquatex outer covering and Dampabase undercushion for your dampening rollers. New pre-cut lengths to the size of your rollers, complete with drawstrings or laces, make Aquatex and Dampabase easier than ever to apply. Order from your supply house. In Canada, Canadian Fine Color Company.



They're Better Because They're Seamless

GODFREY ROLLER COMPANY
ROLLER MAKERS FOR 93 YEARS

211-221 N. CAMAC STREET • PHILADELPHIA 7, PA.

**A SIZE
FOR EVERY
PRESS**

Penn/Brite Offset

the paper for Color reproduction



N



ew York and Penn

Advertising in "Business Week"
helps businessmen appreciate good printing

These ads were developed to help businessmen appreciate the technical skill and painstaking care that go into good printing...to help them understand what printers need to do a good job...and to help printing craftsmen get recognition for their skill and experience.

The series started running over a year ago in the magazine *Business Week*, read by 300,000 of the most influential businessmen in America. Since then reprints have been distributed by the Education Council of the Graphic Arts to vocational schools across America, and printers and lithographers have requested reprints, or the loan of electros, for their own use.

We are pleased to provide businessmen with a glimpse of one of America's great industries. We shall continue to do so over the year to come, covering many more of the key functions of printing.

Both reprints and electros are also available to you on these and the other ads in this series. Use them as invoice stuffers, package inserts with your orders, or to mount as a series on your wall. Write on your business letterhead. We shall appreciate your comments.

ANOTHER IN A SERIES about a partner in your business



Being this man at work, you might think he was a magician, the way he makes words and pictures materialize on metal. He's not a magician. Just an A. S. A. man, several years in the past, several years in the future... as expert as new value and much more.

The other platemaker is first of all a skilled craftsman. "Plating" is an image on a light-sensitive metal plate some image, but his exposure must be precise to capture the tone of the original artwork. His knowledge of the chemistry and physics of his job must be thorough. And since new refinements and materials are constantly being introduced into his job, you'll find him to be a craftsman as well. His skills play a major part in the fine quality of modern offset lithography.

People in Printing:
PLATEMAKER

Your printer can be just about the best friend you have in business. Be wise and ask for his advice before you plan your next job.

Give him time enough to do your job well. Give him correct copy—be just as meticulous as you are to avoid costly corrections. And ask him about the paper that's best for your printing job. For the right paper is an indispensable ingredient in good printing. Or write New York & Pennsylvania Co., 230 Park Avenue, New York 17, N.Y.

New York and Penn
Paper and Paper Manufacturers

OFFSET • COLLOR FORMS • FOLDING • COLLOR FORMS LITHO • BOOK BINDER • MEDIA • TABLET • REPLICATOR • MICROGRAPH • GRAPHIC



ANOTHER IN A SERIES about a partner in your business



All lithography depends on the simple chemical principle Anton Smethke recognized 160 years ago: that oil and water do not mix, and that an image, transferred onto a "plate" coated with an oily emulsion, will pick up and "print" inks that are repelled from other water-moistened areas of the same surface.

That is about to happen here. The lithographic plate has been changed around a press cylinder. This revolves against water rollers which maintain the designated non-printing areas of the plate, then against ink rollers which leave ink on the greasy image, and finally against a "blanket" cylinder which picks up the ink from the image and "offsets" it onto the paper you see here.

It's a delicate process. Any one of a hundred mishaps could spoil the job. That's why experience in lithographic presswork counts for so much.

People in Printing:

THE OFFSET PRESSMAN

Without presmen, there would be no printing, and most human affairs would revert to the Dark Ages. For printing is the means of preserving all knowledge, of disseminating all information. It is the courier of business everywhere.

As the courier of your business, it reflects your corporate personality. And a big part of making the right impression comes from using the right paper. Your lithographer knows this. Let him advise a paper for you—or write New York & Pennsylvania Co., 230 Park Avenue, New York 17, N. Y.

New York and Penn

Help and Paper Manufacturers

MAKERS OF PENN/BRITE OFFSET • PENN/BLOSS PLATE • PENN/PRINT CORREL • ENGLISH FINISH • ENGLISH FINISH LITHO • SUPER • GLADIATOR PAPERS

ANOTHER IN A SERIES about a partner in your business



Perhaps it might be better to call him a "partner" in your business. For he is in the beginning stage of his professional life, working and learning under the watchful eye of a master printer.

A registered apprentice spends about six years learning the "secrets" of fine printing. Each year he acquires more knowledge, takes on more responsibility, and on the fourth year he is usually ready to take over the business. He is usually recognized as a fully trained and capable "apprentice" who knows his craft and is qualified to practice in any print shop.

Each of the various printing crafts are learned through this apprentice system. It is a long and exciting career that grows, matures of the highest order.

People in Printing:

THE APPRENTICE

The engraver, typographer, pressman and other craftsmen who help prepare your printed material are highly skilled. Many have spent more time learning their jobs than some engineers or accountants.

That's why many executives look on their "printers"—and the craftsmen associated with him—as a professional adviser. Next time you have an important job to print, call on your printer for advice. Ask him about good paper, too. Or write New York & Pennsylvania Co., 425 Park Avenue, New York 22, N. Y.

New York and Penn

Help and Paper Manufacturers

MAKERS OF PENN/BRITE OFFSET • PENN/BLOSS PLATE • PENN/PRINT CORREL • ENGLISH FINISH • ENGLISH FINISH LITHO • SUPER • GLADIATOR PAPERS

ANOTHER IN A SERIES about a partner in your business



We come closer to the definition of the job of the continuing team called the stone man. And, since the further down of printing, his function has been vital. For it is the stone man who gets the job ready for the press.

One or two pages or more of a magazine are printed in stone. From the form, the stone man must arrange these individual pages, each one often a "page proof" of hundreds of pages of type and engravings, in the proper sequence and fit them all together so snugly that the entire form will be secure on the press.

A stone man and a "hot" for his work are professionals. For the stone man's job. His skill and intense workmanship help give your printed message the quality you want to represent you and your business.

People in Printing:

THE STONE MAN

We sometimes overlook the many skills needed to get a printed page before our eyes. The stone man, one of scores of craftsmen in the graphic arts, symbolizes the complexity of a great industry.

Your part of the job is easier—and your printer's, too—when you appreciate the skills that go into every printed page. Add him to your list of people who help you get the job done. Or write New York & Pennsylvania Co., 425 Park Avenue, New York 22, N. Y.

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ANOTHER IN A SERIES about a partner in your business



Ever look at a printed picture, or a "dot" in a newspaper, and wonder how it got there? The man who makes it is the dot etcher. He is the man who takes the original and makes it into a form that the press can use. He is the man who takes the original and makes it into a form that the press can use.

The man who makes it is the dot etcher. He is the man who takes the original and makes it into a form that the press can use. He is the man who takes the original and makes it into a form that the press can use.

The man who makes it is the dot etcher. He is the man who takes the original and makes it into a form that the press can use. He is the man who takes the original and makes it into a form that the press can use.

People in Printing:

THE DOT ETCHER

Dot Etching, like photo engraving or a more of other occupations in the graphic arts, is like wine-making. The product is never improved by haste or inferior ingredients. Good lithography takes time. It also takes good quality, right at the start, in the illustrations to be used.

The secret is simple. Call your lithographer early, get his advice, and give him plenty of time to do a good job. Ask him about paper, too. Or write New York & Pennsylvania Co., 425 Park Avenue, New York 22, New York.

New York and Penn

Help and Paper Manufacturers

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ANOTHER IN A SERIES about a partner in your business



The final product is the printed page. The man who makes it is the cutter. He is the man who takes the printed page and makes it into a form that the press can use. He is the man who takes the printed page and makes it into a form that the press can use.

The man who makes it is the cutter. He is the man who takes the printed page and makes it into a form that the press can use. He is the man who takes the printed page and makes it into a form that the press can use.

The man who makes it is the cutter. He is the man who takes the printed page and makes it into a form that the press can use. He is the man who takes the printed page and makes it into a form that the press can use.

People in Printing:

THE CUTTER

To produce the kind of printing job that reflects credit on you and your business, your printer must call on an entire team of craftsmen. The Cutter is one of them.

When you have printing to be done, rely on your printer's knowledge of all the aspects of the job. Get his advice. Ask him to show you how savings can be made. And listen to his suggestions on the best grade of paper to use. Or write New York & Pennsylvania Co., 425 Park Avenue, New York 22, N. Y.

New York and Penn

Help and Paper Manufacturers

MAKERS OF PENN/BRITE OFFSET • PENN/BLOSS PLATE • PENN/PRINT CORREL • ENGLISH FINISH • ENGLISH FINISH LITHO • SUPER • GLADIATOR PAPERS

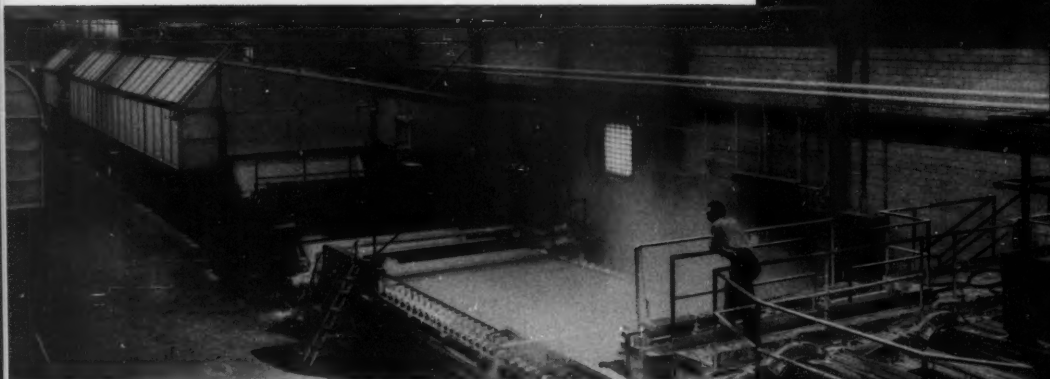
TEAR IT OUT AND SAVE IT FOR YOUR FILES.

New York and Penn

**CHECK THESE GREAT FEATURES
OF**

Penn/Brite Offset

- **superior quality** — as measured by every objective standard applied to offset paper.
- **moderately priced** — to bring you savings even when "only the best will do."
- **moisture controlled** — when it's made and finished, to minimize stretch and shrinkage on your presses.
- **stocked** — in popular weights and sizes by leading merchants and at our Lock Haven, Pa., mills for fast shipment to major markets.



Sixteen paper-making machines turn out more than 750 tons of paper daily for the magazine, bound book, and commercial printing fields.



Write for a swatch book, today.
Address: New York & Pennsylvania Co., 425 Park Ave.,
New York 22, N. Y.



New York and Penn
Pulp and Paper Manufacturers

Makers of Penn/Brite Offset • Penn/Gloss Plate • Penn/Print Papers: Eggshell • English Finish • English Finish Litho • Super • Clarion Papers: Duplicator • Mimeograph • Bond • Tablet

Meetings

Lithographers National Association, 53rd annual convention, Arizona Biltmore Hotel, Phoenix, Ariz., April 28-May 1.

National Association of Litho Clubs, annual convention, Shoreham Hotel, Washington, D.C., May 1-3.

International Fair for Print and Paper, DRUPA, Dusseldorf, Germany, May 3-16.

Web Offset Section, Printing Industry of America, Drake Hotel, Chicago, May 8, 9.

Southern Graphic Arts Association, 37th annual convention and exhibit, Brown Hotel, Louisville, May 19-21.

Research and Engineering Council of the Graphic Arts, eighth annual meeting, Edgewater Beach Hotel, Chicago, May 21-23.

Technical Association of the Graphic Arts, annual convention, June 22.

National Association of Photo-Lithographers, annual convention, Statler Hotel, Boston, Sept. 28-Oct. 3.

8th Annual Southwest Litho Clinic, Rice Hotel, Houston, June 20-22.

BREVITIES

GAR HOM, San Francisco lithographer, has moved his Ad Printing and Stationery Co. to 1329 Powell Street.

ELECTRIC TYPEWRITER DIVISION of IBM has announced the appointment of Bart M. Stevens as sales manager, and Gordon M. Moodie as assistant general manager of the division.

BREARLY E. NICHOLSON has been appointed Chicago district sales supervisor of Ansco. He has been with the company four years, holding sales positions in the Atlanta district.

WILLIAM J. MARKEY has been named Atlanta branch sales supervisor for printing products by Minnesota Mining & Manufacturing Co. He joined the company in 1953 and was a lithographic products salesman at 3M's Philadelphia branch office.

CLAYTON CHEMICAL Co., 2100 Dempster St., Evanston, Ill., is offering a technical report detailing the characteristics of the Clayton Film-All developer.

PHILIP LYMAN has been appointed sales manager of Wiesner & Holm Co., Milwaukee. He formerly was sales manager for American Business Forms and Bonnar Vawter companies.

COLUMBUS REPRODUCTION Co., Inc., lithographers, has been granted charter of incorporation listing capital stock of \$5,000.

E. L. WATSON is now representing George R. Keller, Inc., in part of North and South Carolina.

PHILIP J. FISHER has been named assistant to F. W. Stein, vice president, manufacturing, Standard Register Co., Dayton, O.

GORDON SCHROEDER, controller of Philipp Lithographing Co., Milwaukee, addressed the Controllers' Institute of the Graphic Arts at a luncheon meeting at the Milwaukee Athletic Club.

LINCOLN LITHOPLATES, Inc., Baltimore, has expanded into an additional 8,000 sq. ft., on 1-3 So. Frederick St. The four year old firm now has a total of 16,000 sq. ft.

PERRY A. POWELL, formerly vice president in charge of production, has been elected president of Modigraphic, Inc., Cincinnati, manufacturer of graphic arts cameras. Wayne Douglas was named vice president.

NU-RESIN*

Premium* STAGE-OUT LACQUER


TO REMOVE UNWANTED PLATE LINES AND SPOTS!

NU-RESIN STAGE-OUT LACQUER

NU-RESIN is an exceptional lacquer which was designed after years of research and testing with platemakers over the country. Easy to apply and with FAST drying characteristics, NU-RESIN is a synthetic resin base lacquer that goes much further — has more mileage in actual use.

NU-RESIN resists developing and etching solutions and provides the platemaker with a positive stage-out lacquer which absorbs practically no moisture from the air.

NU-RESIN has been acclaimed by platemakers as a "new approach" to the plate stage-out process and results prove that time and money savings are appreciable with its use.



EASY to apply
MORE mileage
FAST drying

Write today for additional information and prices.



CHEMICAL and SUPPLY, INC.

1640 N. 31st Street • Milwaukee 8, Wisconsin

- O. N. OLSEN PHOTOGRAPHIC SUPPLIES, 139 East 5th St., St. Paul 1, Minn.; 325 E. 15th St., Minneapolis, Minn.
- JOHN STARK LABORATORIES, Pearl Street, South Hadley, Mass.
- SURE DOT LITHO SUPPLY, INCORPORATED, 1636 West Van Buren Street, Chicago 12, Illinois
- WESTERN LITHO PLATE & SUPPLY COMPANY, 1927 South 3rd Street, St. Louis 4, Missouri
- ZENITH GRAPHIC SUPPLY, 4-05 Twenty-Sixth Avenue, Long Island City 2, New York



"Shoot this job on Cronar®— we have to hold the negative"

When you hold the negative for possible reprints—and isn't this usually the case?—it's time to use Du Pont Photolith Ortho A on "Cronar" base. Here's why:

Photolith on "Cronar" will not crack, tear or become brittle. Even if extremely rough handling kinks the film, *the base will not form a hazy area that shows up as a defect in the printing plate.*

This amazing film has exceptional dimensional stability. It resists shrinking or stretching with changes in temperature and humidity. Because of this stability, the problem of storing negatives is a thing of the past. Since "Cronar" polyester film base does not absorb moisture, drying time is considerably reduced. These vital qualities of Photolith Ortho A make it easier to use,

easier to store, and easier to *re-use*.

Your customers deserve the best—and for the best jobs you can possibly turn out, investigate Du Pont Photolith Ortho A on "Cronar" . . . a high-contrast high-speed orthochromatic emulsion on the toughest film base you can use. "Cronar"-based Photolith Ortho A is off the "limited supply" list. Now you can order unlimited quantities in all standard sizes and in either the 4- or 7-thousandths thickness. You—and your customers—will notice the difference on the very first job.

E. I. du Pont de Nemours & Co. (Inc.), Photo Products Department, Wilmington 98, Delaware. In Canada: Du Pont Company of Canada (1956) Limited, Toronto.



Reg. U.S. Pat. Off.
Better Things for Better Living
... through Chemistry

DU PONT PHOTOLITH ORTHO A for Functional Photography

Photography with a purpose . . . not an end in itself but a means to an end.

AMAZING NEW LITTLE BENJY PLASTIC LACQUERS

tough!

**the toughest, longest-lasting
film of any lacquer ever**

Here's a revolutionary lacquer that comes in two types—for surface and deep etch plates. Both have bonding strengths 100 times greater than any other lacquer. Little Benjy produces a film of high flexibility . . . no cracking when plate is wrapped around cylinder (and that's when 70% of all plate damage happens.) Moreover, this plastic lacquer film exhibits both tremendous affinity for ink and high repellency for gum and water.

Little Benjy Deep Etch Lacquer can be used on aluminum plates with *no copperizing*! Pressmen are finding that the image is virtually indestructible. They're getting longer runs without binding. Plates print sharper.

It's easier to use, too. It's self-leveling and smooth-spreading. You owe it to yourself to try it soon. Order from your jobber or write Knox Soap Company direct.

LITTLE BENJY

SPECIALTY CHEMICALS FOR LITHOGRAPHERS

KNOX SOAP COMPANY • 3300-22 W. CERMAK RD., CHICAGO

MODERN LITHOGRAPHY, January, 1958

**LITTLE BENJY
PLASTIC
DEEP ETCH LACQUER**



KNOX
SOAP COMPANY

1300-22 WEST CERRA RD. • CHICAGO 21, ILLINOIS

**CAUTION
COMBUSTIBLE
MIXTURE**

DIRECTIONS
This lacquer is self-leveling and rather slow drying. It should be brushed down gently to a thin even layer. Can dry for at least four minutes.

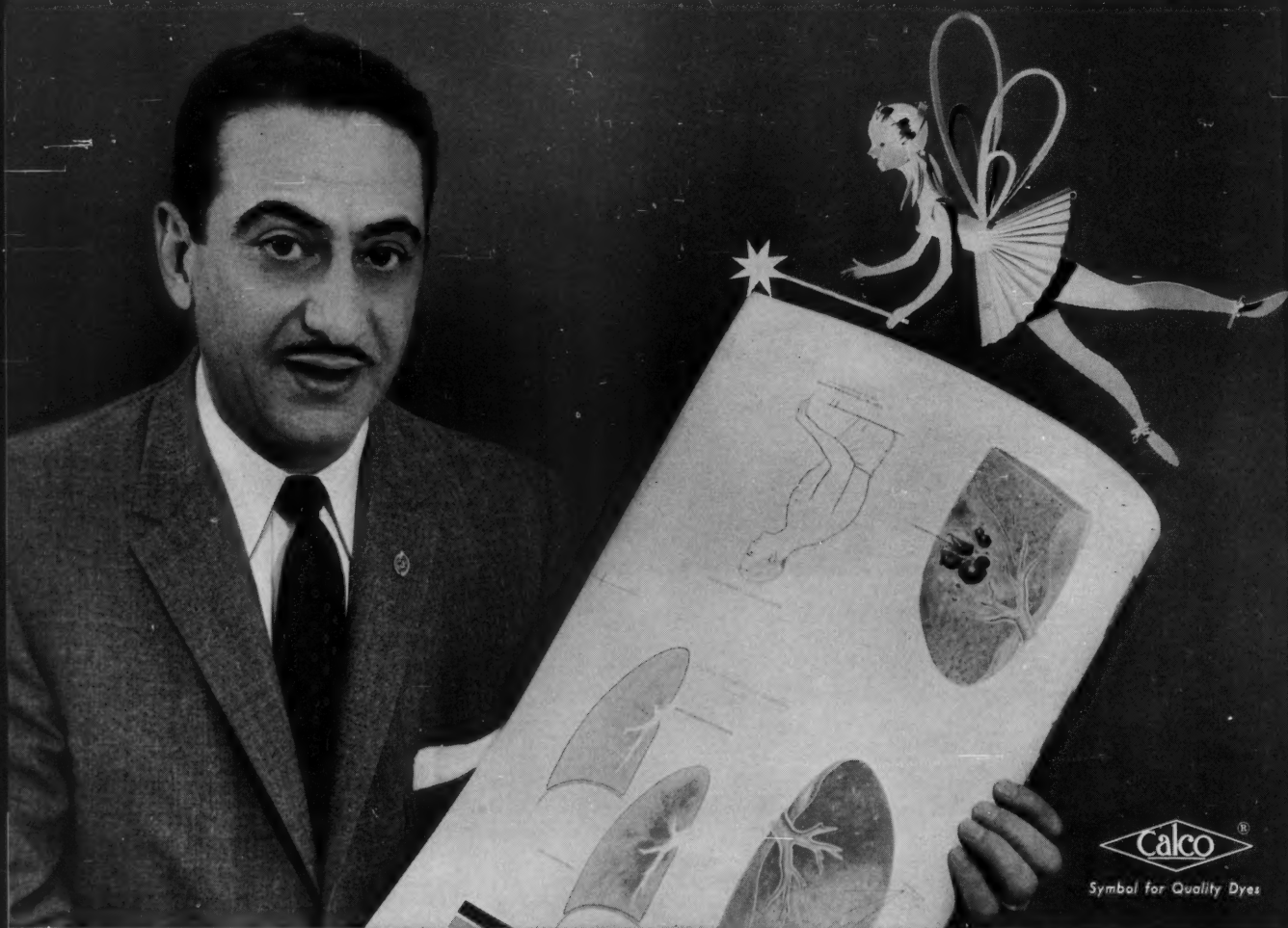
Note: This type Plastic Lacquer produces a shiny "kiss" on the metal which is desirable. This condition is due to the nature of the plastic involved.

Works equally well on aluminum plates with or without copperizing.

Keep open. Reproductible with any heat stable ink. Do not use on non-reproducible materials. Do not use on non-reproducible materials.

"Calcofluor's 'Glow-White' made our Clinoptikon booklets bright and sparkling!"

—SAYS MR. R. C. NAJARIAN, ADVERTISING MANAGER, SCHERING CORPORATION, BLOOMFIELD, N. J.



Calco
Symbol for Quality Dyes

"Extreme whiteness was a special requirement for our Clinoptikon series because we wanted the booklets to have an appearance of clinical cleanness that would be inviting to the professional reader. The CALCOFLUOR-treated stock which was selected gave the clean look we wanted, and also helped us to obtain bright, crisp color reproduction of the anatomic illustrations."

And you, too, can achieve the same brilliant results! Just specify papers that contain the "GLOW-WHITE" touch of CALCOFLUOR* fluorescent dye. These "whiter-than-white" papers provide maximum contrast between blacks and whites...sharpen halftone details...improve print legibility.

For a clean, crisp job with a quality look and real self-selling power use a CALCOFLUOR-treated stock for

Catalogs • Annual Reports • Sales Literature • Manuals
Business Cards • Folders and Greeting Cards • Programs • Books
Pamphlets • Labels • Packages • Letterheads • Business Forms

Let your own eye prove the difference! Ask your paper jobber for samples, or write to Cyanamid.

*Trademark

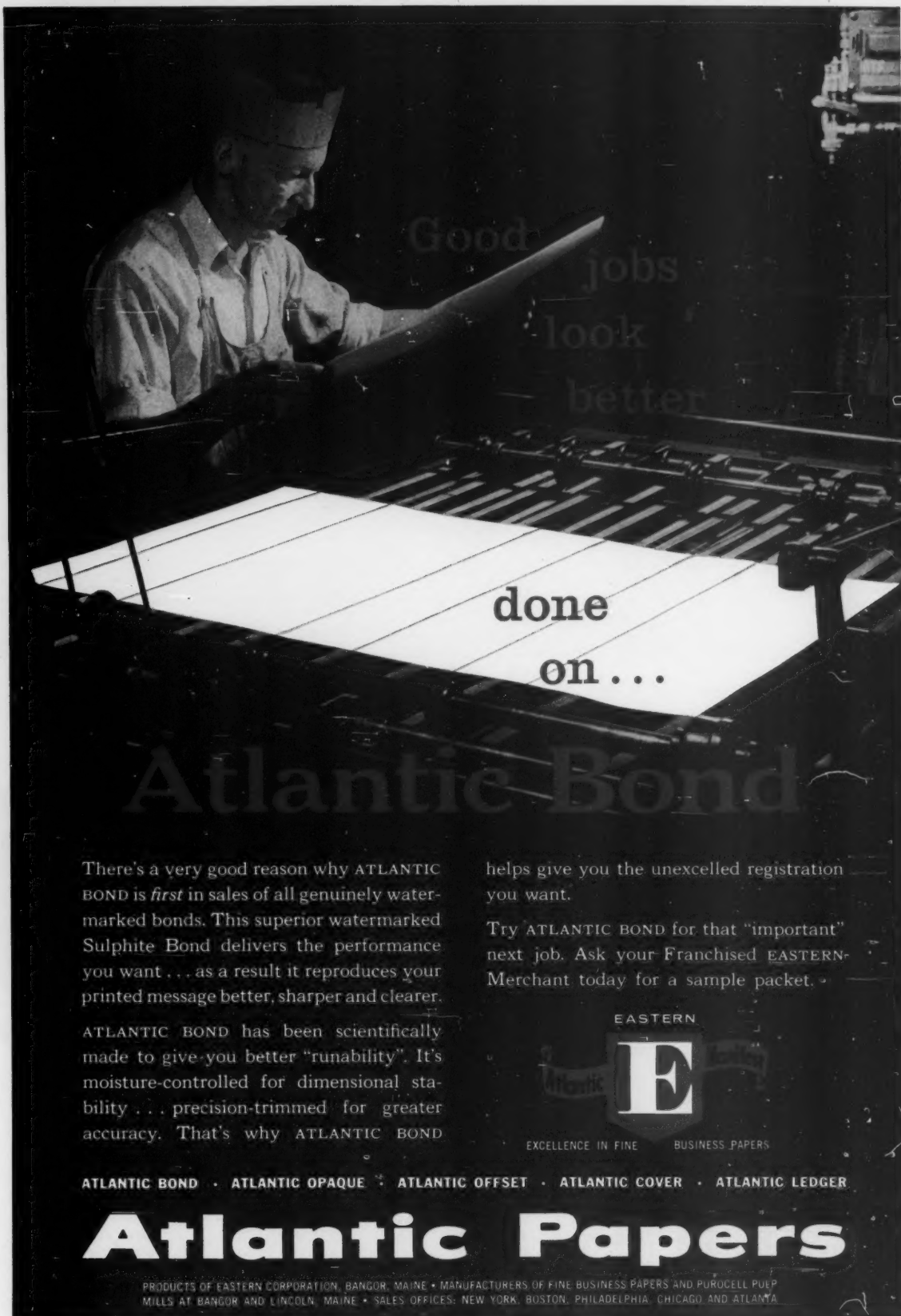
CYANAMID

AMERICAN CYANAMID COMPANY
DYES DEPARTMENT
Bound Brook, New Jersey

New York • Chicago • Boston • Philadelphia
Charlotte • Providence • Atlanta • Los Angeles
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Montreal and Toronto

CALCOFLUOR



Good jobs
look
better

done
on . . .

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There's a very good reason why ATLANTIC BOND is *first* in sales of all genuinely watermarked bonds. This superior watermarked Sulphite Bond delivers the performance you want . . . as a result it reproduces your printed message better, sharper and clearer.

ATLANTIC BOND has been scientifically made to give you better "runability". It's moisture-controlled for dimensional stability . . . precision-trimmed for greater accuracy. That's why ATLANTIC BOND

helps give you the unexcelled registration you want.

Try ATLANTIC BOND for that "important" next job. Ask your Franchised EASTERN Merchant today for a sample packet.

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Atlantic
EXCELLENCE IN FINE BUSINESS PAPERS

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Atlantic Papers

PRODUCTS OF EASTERN CORPORATION, BANGOR, MAINE • MANUFACTURERS OF FINE BUSINESS PAPERS AND PUROCELL PULP
MILLS AT BANGOR AND LINCOLN, MAINE • SALES OFFICES: NEW YORK, BOSTON, PHILADELPHIA, CHICAGO, AND ATLANTA



FREE—Would you like a large two-color reproduction of this illustration by Robert Lopshire suitable for framing? Just drop us a line and ask for your free print of "Jet Fire".

Precise illustrations make fine reproductions when you use POWERLITH film

The excellent qualities of Chemco's Powerlith film are readily proved by comparative tests in your darkroom. It has exceptionally high contrast and produces extremely hard dots and crisp lines free from "squeeze-up" during development. Its sensitivity and fine balance over the entire scale produces halftone negatives of wide tonal range. Powerlith is available in both regular and thin base in 14 sheet sizes and 19 roll sizes.

Chemco's Powerlith film and its darkroom companions, Powerdot Developer and Power-Fix, can improve the quality and efficiency of your platemaking operation... a fact we can prove by demonstration. They are the results of 34 years of constant research and development by Chemco... whose entire efforts are devoted solely to the manufacture of uniformly fine film, chemicals, cameras and equipment for photomechanical reproduction.



CHEMCO PHOTOPRODUCTS CO., INC.

Main Office and Plant—Glen Cove, N. Y.

Atlanta	Boston	Chicago	Dallas
Detroit	New Orleans	New York	

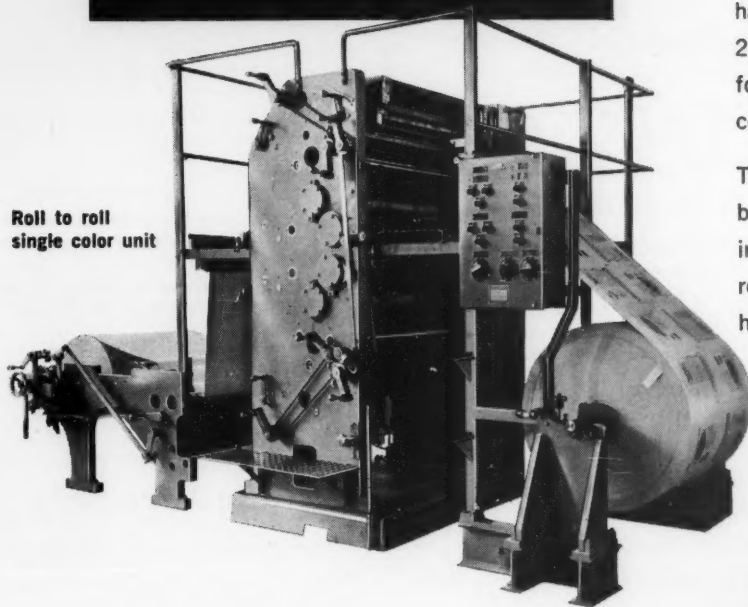
SEE...
*an Outstanding
 Example of
 Fine Offset Printing
 by the
 Portland, Indiana
 Graphic*

**PRODUCED ON A HANTSCHO
 ROLL FED 22½" x 36" LITHO
 PRESS . . .** Clarity of half-tones
 will amaze you . . . They're "Fine
 Magazines" quality, yet printed on
 standard news print paper—Get a
 copy (from us) of this outstanding
 tabloid . . . examine every page . . .
 display ads, classified, editorial copy
 —Note the freedom from smudge or
 ink clogging and see how easily even
 the smallest type can be read!

This Hantscho Roll Fed Litho Press is
 ideal for suburban and community
 newspapers and tabloids. Press
 speeds up to 20,000 impressions per
 hour...and with collator and folder,
 handling up to 6 webs, delivers up to
 24 tabloid pages plus one quarter
 fold at speeds from 5000 to 6000
 complete papers per hour.

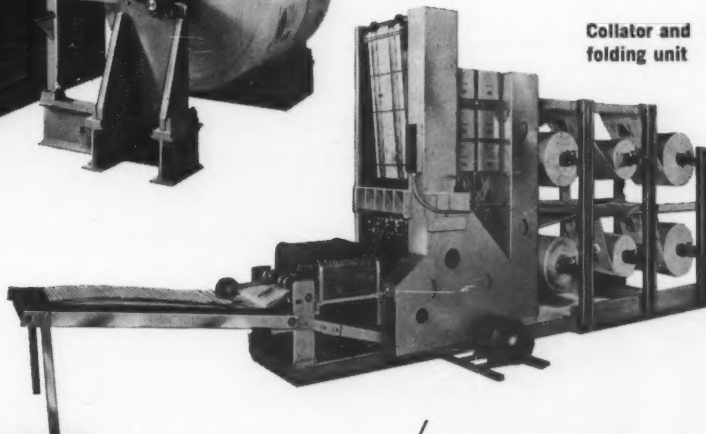
The Graphic uses a 36" web width,
 but this same press can be supplied
 in 18" web width to lithograph and
 rewind a 4 page tabloid at the same
 high speed.

**Roll to roll
 single color unit**



*Get the facts about this NEW
 type web-fed press that is
 revolutionizing newspaper
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**Collator and
 folding unit**



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**MIDWEST REPRESENTATIVES:
 153 WEST HURON STREET
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Many Lithographers Have Asked

**Why do Spectrum Litho Inks
perform so well?**



After a year and a half of consistently good results with Spectrum Litho Inks, many lithographers have asked why these Spectrum Litho Inks give them such remarkable performance.

One reason is that these press-ready litho inks contain special ingredients which aid in the transfer of the ink film.

But It Is Results That Count!

Spectrum Litho Inks are not ordinary litho inks. When you use Spectrum Litho Inks you get these advantages:

1. Considerably more resistance to emulsification.
2. Lays a far-smoother film deposit.
3. Consistently dries better in the pile.
4. Results in flatter sheets being delivered.
5. Minimizes tendency to offset.
6. Traps better on multicolor presses.
7. Removes hickies from plates.
8. Produces a sharper dot.
9. Shows a greater color value per pigment percentage.
10. Reproduces tone values on all stocks with less dryback (less absorption into stock).
11. Excel in "ink mileage" far beyond expectations.

NOTE: If you haven't yet installed Crescent Spectrum Ink Service in your plant, these superb Spectrum Litho Inks are available on individual order.

Inks of Positive Quality

Look to Crescent for Ink Leadership



INK & COLOR COMPANY

464 N. 5th St., Philadelphia 23, Pa.
3901 W. Rohr Ave., Milwaukee, Wis.
244 Forsyth St., S.W., Atlanta, Ga.

INKS FOR LETTERPRESS • LITHOGRAPHY • FLEXOGRAPHY • ROTOGRAVURE

Litho Schools

Canada—Ryerson Institute of Technology.
School of Graphic Arts, 50 Gould St.,
Toronto, Ont., Canada.

Chicago—Chicago Lithographic Institute, 1611
W. Adams St., Chicago 12, Ill.

Cincinnati—Ohio Mechanics Institute, Cincinnati, Ohio.

Cleveland—Cleveland Lithographic Institute, Inc., 1120 Chester Ave., Cleveland 14, Ohio.

Los Angeles—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.

Minneapolis—Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis 3, Minn.

Nashville—Southern School of Printing, 1514 South St., Nashville, Tenn.

New York—New York Trade School. Lithographic Department, 312 East 67 St., New York, N. Y.

Manhattan School of Printing, 72 Warren St., New York, N. Y.

Oklahoma—Oklahoma A & M Technical School. Graphic Arts Dept., Okmulgee, Okla.

Rochester—Rochester Institute of Technology Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 8, N. Y.

Philadelphia — Murrell Dobbins Vocational School. 22nd and Lehigh, Philadelphia, Pa.

Pittsburgh—Carnegie Institute of Technology. School of Printing Management, Pittsburgh.

San Francisco—City College of San Francisco. Ocean and Pheasant Aves., Graphic Arts Department.

St. Louis—David Ranken, Jr., School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.

Vancouver—Clark College.

West Virginia—W. Va. Institute of Technology. Montgomery, W. Va.

Trade Directory

Lithographic Tech. Foundation
Wade E. Griswold, Exec. Dir.
131 East 39th St., New York 16, N. Y.

National Assn. of Photo-Lithographers
Walter E. Soderstrom, Exec. V.P.
317 West 45th St., New York 36, N. Y.

Lithographers National Association
W. Floyd Maxwell Exec. Dir.
381 Fourth Ave., New York 16, N. Y.

National Assn. of Litho Clubs
Edward L. Bode, secretary
504 Marjorie Ave.
Dayton 4, Ohio.

Printing Industry of America
Bernard J. Taymans, Mgr.
5728 Connecticut Ave., N.W., Washington, D.C.

Internatl. Assn. Plg. House Craftsmen
P. E. Oldt, Exec. Sec'y.
307 E. Fourth St., Cincinnati 2.



Newspapers by Offset

Dear Sir:

In your September, 1957 issue we noticed a request in the Letters column for those knowing of offset publications to pass the information on to you.

We know of the following offset newspapers in Washington and Oregon:

Quincy Post-Register
Quincy, Wash.
Franklin County Graphic
Connell, Wash.
Weekly Reporter
Lynwood, Wash.
Shoreline Reporter
Richmond Highlands, Wash.
Marysville Globe
Marysville, Wash.
The Times
Rouge River, Ore.
The Pilot
Brookings, Ore.

In addition, there is one in Toppenish, Wash., but we can't recall the name.

When and if you publish a list of all the offset publications, we'll be pleased to see it. We feel a need for a medium reaching all such publications because of problems pertinent and peculiar to the offset newspaper.

Sim. R. Wilson, Jr.
Marysville Globe
Marysville, Wash.

Thanks for the list. Now, how about hearing from readers in other regions? Eventually, with cooperation around the country, ML hopes to be able to publish a complete list of newspapers by offset.

—Editor.

'Cold Type' Correction

Dear Sir:

In reading Mr. Ewing's report ("Review of Cold Composition," by Gordon R. Ewing, November, p. 47) we noted that he indicated that the "Monophoto" machines at Westcott & Thomson and E. I. DuPont are field test machines. This is not true. The two machines are our production models and are exactly the same as the machines currently being shipped to the government and pending shipments for other customers in the United States.

Our field test on the "Monophoto" machines was completed in our own plant and in plants in England and Europe.

P. J. McMaster,
Lanston Monotype Co.,
Philadelphia

Printing Safety

Dear Sir:

My work is that of a government industrial safety and welfare inspector.

I would be very pleased if you could send me a copy of the article entitled "Accidents Don't Happen, They Are Caused," which appeared in the August, 1957 issue of MODERN LITHOGRAPHY.

J. T. Wilson
Yarraville,
Victoria, Australia

Copy has been sent.—Editor.

'3-Color' Addresses

Dear Sir:

In your issue of June, 1957, in the fourth part of Mr. Lupo's series of articles entitled "Three-Color Direct Separation," he mentions the Klimsch Reprocolor, distributed by Reprographic Machines, Inc., New York. Also Hanimex Laboratory, Inc., New York; Caprock Developments, New York; and the Neutra Screen Co., of Connecticut.

May we please receive the addresses of these firms?

H. Schwartz
Lithographic Platemaking Co.
Montreal, Canada

Following are the addresses you have requested: Caprock Developments, 165 Broadway, New York 16, N. Y. Reprographic Machines, 180 Varick St., New York. Hanimex, U.S.A., Inc., 770 Eleventh Ave., New York. Neutra Screen Co., 130 Forrest Hill Road, Hamden, Conn. — Editor.

Correspondence Course

Dear Sir:

I receive MODERN LITHOGRAPHY each month and enjoy reading it. This book has helped me greatly in my work. I do camera work and run a S7L (36 x 48") Harris offset press on which we print two weekly offset newspapers.

I am interested in furthering my education in offset lithography. Can you give me any information on how I can secure a correspondence course in lithography and camera and layout? Also, is it possible to secure these courses through Lithographic Foundation and how may I join this organization.

William B. Lewis
Easley, S. C.

We know of no correspondence course, as such, on lithographic subjects. However, the Lithographic Technical Foundation, at 131 East 39th St., New York, has books, pamphlets, audio visual aids and other materials that can help you immensely in improving your knowledge of lithographic operations. Suggest you contact LTF directly and request a list of text books and audio visual materials.— Editor.



Get a really
white bond—
get Hamilton!

Your work
is as good
as your bond

Appearance is important in bonds. Hamilton Bond offers you a really bright blue white that's a joy to look at, a joy to print on, a joy to deliver to your customers.

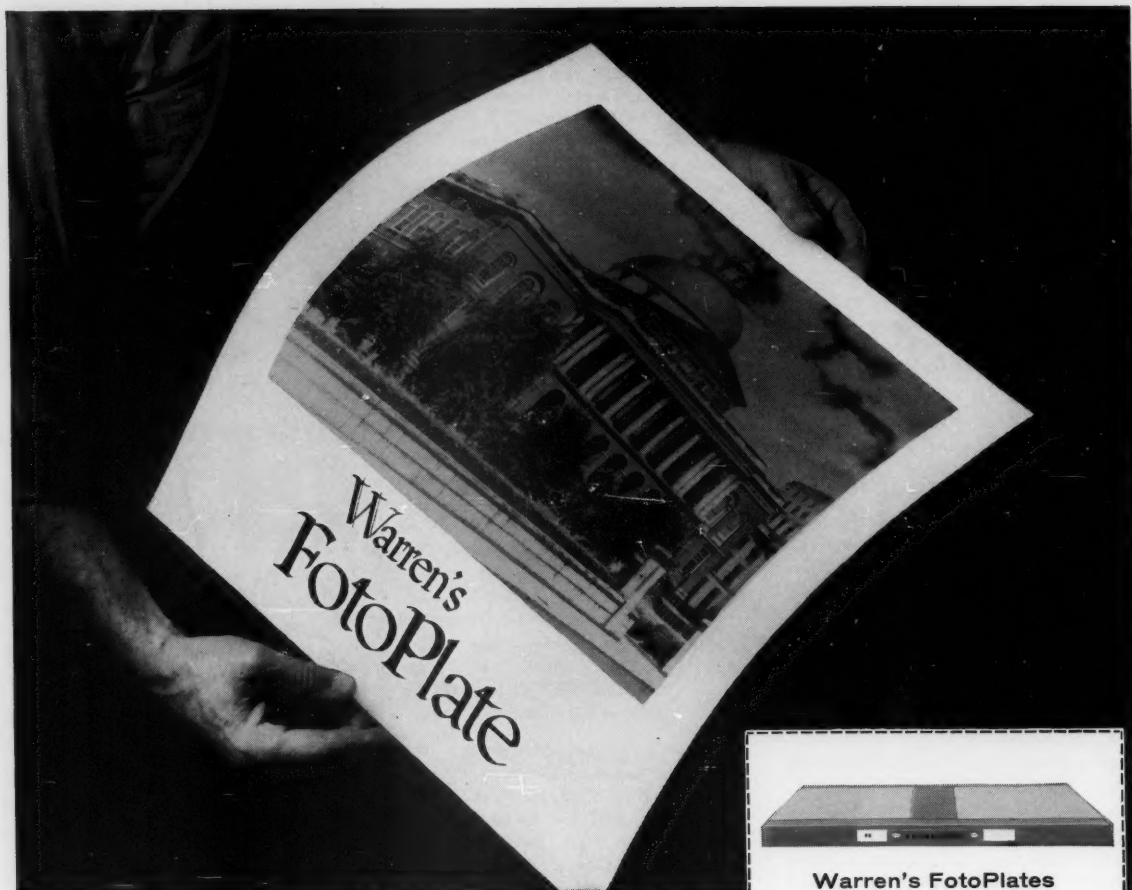
Hamilton Bond has a formation which is handsome, clear and uniform—which insures a level printing surface for best press performance. It is *genuinely* watermarked, strong and durable, pre-humidified, moisture-proof wrapped. Ten distinctive, highly printable colors, too. And matching envelopes. Try Hamilton Bond . . . it brings out the best in your work!

Hamilton Papers



HAMILTON PAPER COMPANY
Miquon, Pa.

Mills at Miquon, Pa., and Plainwell, Mich.
Offices in New York, Chicago and Los Angeles



Warren's FotoPlate

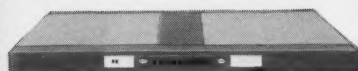
(PRESENSITIZED LITHOGRAPHIC PLATE)

GIVES YOU A TRIPLE ADVANTAGE

1. *It delivers the finest reproductions of halftones.*
2. *Does this with economy.*
3. *And does this with speed and ease.*

Warren's **FotoPlate** possesses excellent dimensional stability. Lithographers like *FotoPlate* because no special technique is required. With *FotoPlate*, more good plates can be made and on press in a working day.

Investigate the advantages of *FotoPlate* for yourself. Get further details and special instruction booklet from any FotoPlate distributor, or communicate with the manufacturer's headquarters: *S. D. Warren Company, 89 Broad Street, Boston 1, Massachusetts.*



Warren's FotoPlates
are available
in the following sizes

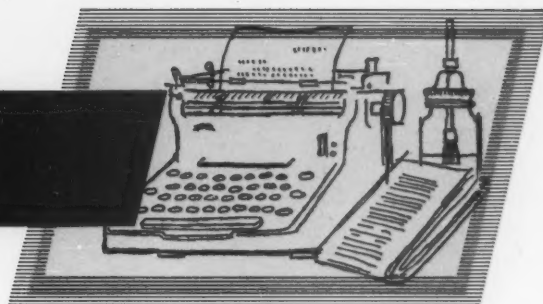
Twenty-five plates to a package.
Four packages (100 plates) to a carton.

17½ x 16	27¼ x 30
15½ x 20½	26¾ x 31
20 x 22¾	25½ x 36
19¾ x 23	26¾ x 36
19⅞ x 24⅞	29½ x 36
22½ x 30	30¼ x 35
24⅞ x 30	32 x 41
27¼ x 28⅞	32½ x 43

Warren's

HIGH STANDARD

EDITORIALS



Tax on Advertising

IT is safe to say that no one likes to pay taxes, yet they are as inevitable as they are necessary. You can't run any kind of government—federal, state or local—without paying for it. It is idle to argue about the *need* for taxes, but it is very much to the point to discuss the *amount* and the *method* of taxation.

Three similar situations, in Baltimore, Norfolk and St. Louis, are cases in point of misapplied taxes that will affect not only those being taxed but indirectly, the lithographic industry as well. And the effect will be felt fast and hard if these situations are not dealt with promptly.

Here's what's happening in the three cities:

- In BALTIMORE, a six per cent tax on advertising was signed into law on Nov. 20. Fifteen advertising firms are steering the law toward a high court test by seeking to enjoin the city from collecting the tax this month.

- In ST. LOUIS, the aldermen, following with interest and enthusiasm the legislation in Baltimore, are readying a similar proposal.

- In NORFOLK, late in December, the mayor proposed to the city Council and eight state legislative representatives that a retail merchants tax of four percent be levied against all advertising sold to radio, TV and newspapers in Norfolk and the state of Virginia as well. The bill is to be introduced this month.

Opposition in Baltimore—the “tryout” city—was immediate. It is reported that labor and business groups have united with the advertising agencies in combatting the measure, which the Advertising Federation of America has termed “... a scourge that can permanently paralyze the

economy of the community.” It is expected that the other communities will be equally as vocal in their opposition, but it is questionable whether the trend can be stopped.

The effect of such taxation on advertisers is obvious. When any community attempts to discriminate against one type of taxpayer, the levy eventually is self-defeating because that industry simply will leave the locality. If the tax becomes nationwide, of course, there will be no place to go, and agencies and their suppliers will suffer.

It is to be hoped that graphic arts associations, both local and national, will oppose these measures as forcefully as possible. If the Baltimore experiment is a success, it can be expected that other tax-hungry communities will jump on advertisers to swell the collection box. And, if such an arbitrary and discriminatory measure can be levied against advertisers, why can't it be levied—just as arbitrarily—against boilermakers, left-handed dentists, or lithographers?

Advertisers and lithographers have no quarrel with taxes as such. But no one wants to pay taxes if they are not *equitably levied* on the whole community. If more money really is needed to operate a state or local government, why not a general increase in the basic tax structure, rather than a willy-nilly assessment against one particular member of that community?

These facts must be apparent to any person of average intellect. But politicians, alas, do not always fit into that category when it comes to fund-raising.

The time for lithographers to act is *now*, before this legislation spreads to other cities and states, for the mortality rate of tax laws is very low indeed. Once applied, no matter how unfairly, they tend to stick.★



A MINOR revolution has quietly taken place in the encyclopedia field. One after another, major publishers of reference sets have been converting from letterpress to offset. One of the earliest conversions was nearly a year ago; others have followed suit.

A survey of the publishers last month by ML brought out the fact that the conversions have been gratifying both to the sales departments and the readers.

The complex changeover from letterpress to offset obviously was not a

spur-of-the-moment decision by the publishers. In each case the move was preceded by several years of study and planning.

Making the switch were the following publishers:

- Grolier Society, publishers of Encyclopedia Americana, which now produces its set by web-offset, including color illustrations.
- Encyclopedia Britannica, which has switched to web-offset, except for halftone and color illustrations, kept on letterpress.

Contrary to some observations of

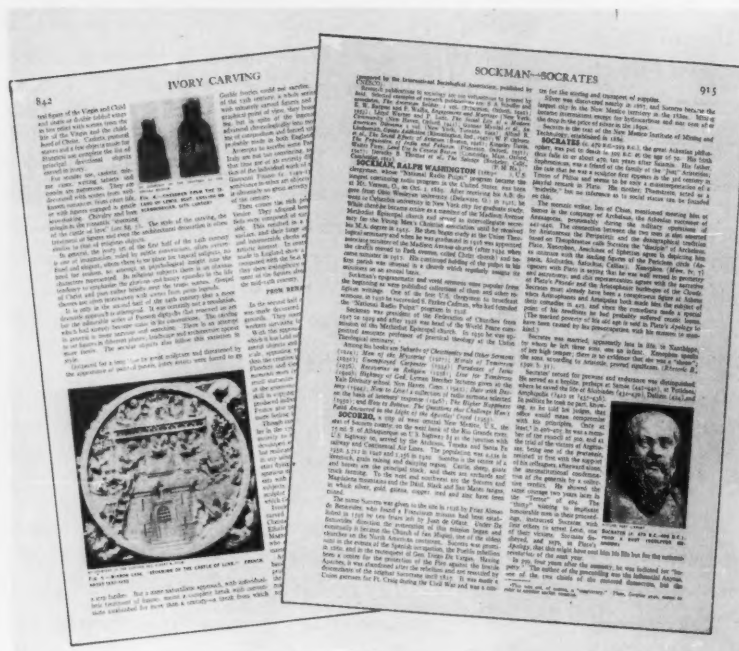
the changeovers, cost was not given as the major factor in either case. The reasons given by both publishers were these:

1. Higher quality, greater readability.
2. Greater speed (Americana estimates about $\frac{1}{3}$ less time needed).
3. Flexibility (ability to use more halftones in text pages).
4. Economy (Britannica).

Commenting on cost factors, an Americana spokesman said "our primary reasons for making the move were advantages in the production of the books. We have made some savings with lithography, but these savings have been offset in part by the increased cost of the heavier offset sheet now used, and the initial cost of converting the plates."

Americana made the big move to offset for its 1957 edition. At first colored illustrations were kept on letterpress, but the company told ML last month that this portion of the production also had been successfully converted to lithography. Rand McNally & Co., Skokie, Ill., is the company doing the color illustrations. The company also produced the text pages and binds the books. Maps are by Hammond.

The 1956 set, by letterpress, used 8 point Old Style body type. With



Left: Typical pages from Encyclopedia Britannica. Above: The complete set.

for Encyclopedias

Right: Three pages from the new Americana. **Below:** Complete set of books.



offset the size has been photographically enlarged to 9 point. In addition, the printed page has been increased from 7 x 9 $\frac{7}{8}$ " to 7 $\frac{1}{4}$ x 10", with a slight reduction in margins. Furthermore, the whiter offset sheet (45 lb. Americana EF litho) is a distinct improvement over the creamy letterpress sheet for eliminating glare (especially important in schools and libraries), according to the company.

Converted LP Plates

Rand McNally converted 25,000 letterpress plates and 1,500 pages of illustrations in copper halftone by the Rantone process into deep-etch positives, from which Lithure plates were made. Another 4,000 pages were entirely reset for offset.

The heart of the production, of course, is the press. At Rand McNally two American Type Founders web presses are utilized. One is a 35" web, and the other a 69" web. Another 69" ATF press was being installed at year's end.

Visually, the encyclopedia is virtually a new book. Not only is the type larger, and the paper whiter, but illustrations are much more numerous. Bleed halftones abound, and there are 500 full pages of pictures compared with only 200 in 1956. There were a few "bugs" in the process at first, involving folding and trimming problems, but these have since been worked out.

The Americana is bound in four editions: regular, school, Canadian and de luxe. First printing was 30,000

sets with 25,978 pages (16- or 32 page signatures).

Britannica Uses Web-Offset

Perhaps even more startling to the lithographic industry was the conversion by the conservative Britannica, which now turns out its massive 24-volume set by web-offset at R. R. Donnelley & Sons, Chicago. A Hoe double-web, roll-fed press prints 128 pages at a time. The press was built

especially for the job. Donnelley also binds the books.

Biggest obstacle in the conversion was transformation of 24,000 electrotype letterpress plates into acetate images, requiring many months. Britannica uses a light weight, 30 lb. English finish stock for text pages, furnished principally by Allied Paper Co., Kalamazoo, Mich., and Bergstrom Paper Co., Neenah, Wis. Insert pages
(Continued on Page 137)



ART and COPY

for offset

By William J. Stevens

Manager, Philadelphia District
Miehle Printing Press & Mfg. Co.

I GET into hundreds of printing plants every year—in the art room, camera room, plate and press rooms—and some of the things I see being done by “progressive” lithographers are shocking.

Perhaps some of these things were excusable back in 1927, when ours was a young industry. But there was less reason for poor quality 10 years later, in 1937, when we were making the same sort of excuses. In 1947 our story was “our boys are back from service and we are getting settled. Pretty soon we will make big improvements in quality.”

Yet today, in 1958, we still are making some of the basic mistakes that we were making 31 years ago, in 1927. Of course there are many modern methods and ideas which take time to learn, but the pride in doing a job right apparently still does not apply to every litho operation. This pride in doing a job right is not new; the need for *wanting* to do a job right is not new; and certainly the sheer necessity of remembering what we are told is not new. Yet we still see many of the same old mistakes, most of them caused by the fact that we don't do the fundamental things we all were taught to do years ago.

It is with the firm conviction that “to start right is to end right” that I want to discuss a few phases of the basic element of good lithography—good copy preparation. There is not room in a short article to cover a subject that some college courses take 160 hours to cover. But we can go over a few of the fundamentals of copy preparation which even the veteran often forgets.

First of all, preparing copy for lithography is basically the same as preparing it for the letterpress process, a method with which we all are supposed to have been familiar for years and years.

Flexibility of Litho

There is one important exception, however. The offset process has much more flexibility than letterpress. Because of this flexibility, art and copy can be prepared with greater latitude in the art room. But, in many cases, this latitude which we have given to the artist and the composing room has been abused.

One example of this flexibility is the ability to help out poor type proofs. It is said that the lithographer can strip type over the halftones which are themselves poor. Yes,

this can be done, but what are the costs?

1. A poor reproduction.
2. Added cost on the job, which no one cares to pay.
3. Another black eye for offset.

The offset process certainly is unique. It can do a lot of things, and do them very well, but we must start with the right material, in this case, *good, clean copy*.

Let's examine some problems of preparing art and copy in an effort to solve the complaints that arise among lithographers and printing buyers.

We must start with one basic premise: *artists are temperamental*. Not that they want to be, it just seems to be characteristic of the profession that they have definite minds of their own, and they sometimes can be very inflexible in their approach to a particular problem of copy preparation.

Did you ever want a particular gray background for a piece of art? And didn't you send it back to the artist several times because he wanted it different? Perhaps one of the reasons for this was that the tools of the industry, the basic fundamentals, were not being applied. Let's consider some of these fundamentals as they apply to four important aspects of copy preparation: photography, reproduction proofs, photostats, and color separation.

Photography

It takes artistry with a camera to illustrate a fact, create an impression or tell a story photographically. But how-

Mr. Stevens is the co-author, with John A. McKinven, of the well-known and highly respected volume *How To Prepare Art and Copy For Offset Lithography*, now out of print. He started as a hand compositor and became plant superintendent of Edward Stern & Co. He joined the Miehle Co. in 1950. This article is based on a recent talk before the Philadelphia Litho Club.



ever skilled, the man who has genius for staging and taking good pictures will fail if he is not assisted by craftsmanship. It requires craftsmanship to make allowances for the changes which inevitably take place in each step, from the original film, to the photographic print, to the lithographer's negative, and finally to the dots of ink on the sheet of paper.

The ideal photographs for reproduction are those *planned from the beginning* with one eye on the final reproduced form. In the normal rush of preparing material for publication, there is often little opportunity to think about the reproduction qualities of a photograph until prints are seen. If it is possible, at the time a photograph is to be taken, by all means plan for good reproduction before the shutter is opened. A little extra time spent in planning photography can save a great deal of costly and unsatisfactory retouching.

The photographer has a number of variables to control in the making of a negative: arrangement, lighting, choice of film, exposure, filters and developing. The best insurance against photographic headaches is the service of a man who knows his business. Ask him to use his skill to produce a negative which is very sharp and brightly lighted to produce detail.

Softness, fuzziness, very dark shadow and even eccentric lighting may be desired in special cases, but for normal, commercial purposes, the negative which is *sharply in focus, clear and distinct* is best for lithography.

Of course, the halftone process rarely improves the quality of any original photograph. The white dots of the screen in the dark shadows of a picture tend to make the shadows lighter; conversely, the fine dark dots in the light areas dull the whiteness of the highlights. Thus, the range from dark to light in the original photograph is compressed and the printed picture appears grayer, and at the same time, a certain amount of detail is lost.

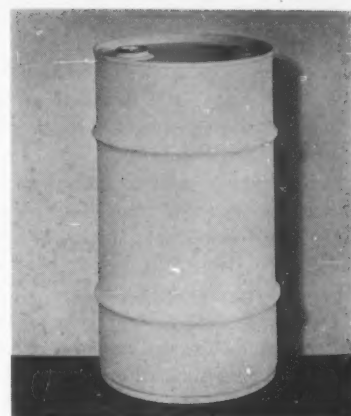
As we all know, the term for this range of tonal values is called *contrast*. A picture with a great range between its deepest black and brightest white is said to have high contrast, while a picture in which the darkest and lightest tones are not widely separated is said to have low contrast.

Some misunderstanding about photography for offset has centered around this term contrast. Contrary to the common belief, the "contrasty" photograph is *not necessarily a good one for lithography*. Obviously a photograph may have high contrast and yet have little detail. More to be preferred is the photo with well distributed spots or strong accents which define detail. Overall contrast can be increased in succeeding steps of the lithographic process, but nothing can be done to provide detail which was never caught by the camera.

The difference can perhaps best be understood by comparing three broad categories of photographic lighting.

1. First of all there is *flat, front lighting*, such as is common in flash bulb photography. This may produce high contrast but it also may give large masses of tone values that are either very dark or very light. Hence, details are lost. (See Figure 1).

Fig. 1.
Flat front lighting.



2. *Side lighting* from a single source may be better because it perks up the illusion of depth, but here, too, the tones usually are in larger masses. Shadow edges merge with backgrounds and are lost. The light side is often too light to show any detail. For good examples, look at many outdoor snapshots in, say, a company house organ. (See Figure 2).

Fig. 2.
Side lighting: loss of detail.



3. The alternative to these is a picture with the lighting balanced with *front and side lighting* to show a full range

Fig. 3.
Good balanced lighting.



of tonal values that give attention to all the desired details. It is contrasty, true, but it also has the interesting pictorial

clarity which is most often desired in lithographed pieces.

If the subject of the photograph is to be outlined or must be otherwise retouched, the photographer can provide for a firm distinction between subject and background. This eliminates guesswork on the part of the retoucher. (See Figure 3).

Large sheets of cardboard are useful as background for dark machinery and the like, to keep the edges from being lost in the shadows. Light objects, obviously, require dark backgrounds.

Even though it is not always possible to direct the taking of the picture, the photographic negative very often is available to the person responsible for preparing lithographic copy. A little care in making a good print will go a long way toward getting better reproduction at no extra cost.

Reproduction Proofs

Now, let's talk about a real sore point between the artist, the agency and the lithographer. I have reference to reproduction proofs.

First, let's consider the paper on which they are made. Antique papers have loose fibers which absorb proof ink and render type with fuzzy outlines. Most high gloss coated papers are just a little hard on the surface and the proof ink has a tendency to spread out. This not only can swell the outline of the letter, but also can thin the ink in the center of each line.

There is a growing use of a paper which does not fall in either of the foregoing categories. This is very high gloss *cast-coated* paper (such as Champion's Kromekote). The surface is soft enough to accept a dense black letter and smooth enough to keep the outline clean.

Another factor to be considered in repro proofs is proof ink and its working characteristics, which are best understood by the typographer. There are some defects in reproduction proofs caused by incorrect ink. After inspection of the proof, the typographer can usually solve the problem. An extra stiff ink can cause picking of the surface of the paper (white spots will appear in the type). Picking necessitates costly retouching.

Soft, soupy ink will spread and cause halos around letters. Naturally, the camera will pick up any such defects and give an unsatisfactory result.

Makeready is the art of getting type to give an even impression during letterpress printing. High letters in a form of type punch deeply into the paper and leave shoulders. Look at the reverse side of a proof for evidence. Low type leaves letters too light or fails to print altogether. Such defects must be corrected if good reproduction is desired. In addition, a tissue placed between fresh proofs and careful handling will help prevent smears.

If the artist tends to use proofs directly upon receipt from the typographer, it will be to his advantage to dry the proofs under a heat lamp for a few minutes. This helps guard against smearing while cutting and cementing is being done. The dusting of proofs with talcum powder or chalk to dry them is *not advisable* because any residue leaves the letters slightly gray and if they are rubbed

hard they will smear. If the artist has difficulty with type proofs, he should consult with the typesetter. Remember that a lithographer can do little to improve unsatisfactory proofs.

Photostats

Now let's go to the use of another common item: the photostat. Photostats are useful for making copies of type and photographs, and for indicating position in copy preparation. They often require retouching, however, if they are to be used as actual copy for the camera. Type, for instance, may have a slightly rounded appearance, which is objectionable for good reproduction in the smaller sizes.

Inferior quality gray photostats are, of course, poor copy and retouching of these generally is a waste of money. Only photostats of line art are suitable for use as copy; photostats of photographs become extremely contrast.

Here are some other tips to keep in mind when ordering photostats:

1. When the photostat is meant to be reproduced, specify a glossy stat.
2. A stat on a slightly larger size paper than needed gives the artist freedom in cutting, pasting and drawing of register marks.
3. Photostatting is a convenient way of obtaining "reverse" art or lettering. Extra margins are especially desirable for this kind of job. Hence, instead of cutting a small word or letter out of the photostat and mounting it on a solid background, it is often possible to cut the negative photostat the actual size of the overall solid area. This will eliminate the white line around the cut edge. If mounting in full size is not convenient, be sure to touch up the white cut edges of the black stat with India ink before mounting.
4. If there are several pieces of reverse line art, it is usually safer to provide all of these in negative form or leave the entire job of reversing up to the lithographer. (To have several negative photostats mounted and other materials marked for the lithographer to reverse can make a very complex camera job out of what might have been a simple task.)
5. Each step in any reproduction tends to lose detail, and photostats are no exception. Fine lines particularly tend to close up in negative photostats. Therefore the artist should make sure that original art will reproduce sharply and white, because any fuzziness will be picked up by the lithographic camera.

Color

So much for photographs, reproduction proofs and photostats. Now let's go to color. We all know that color is the major selling point of all advertising today. In fact every industry is turning to color these days. As far as copy preparation is concerned, there are three basic methods of indicating or supplying art or color for the litho-

(Continued on Page 126)

quality control in PLATEMAKING

(Conclusion)

By Albert R. Materazzi

Technical Representative
Litho Chemical & Supply Co., Inc.

BEFORE I proceed to the application of the tools to the specific field of platemaking I want to stress that before any quality control program can be set up we must presuppose four things. Without these it is useless to attempt to produce quality controlled plate.

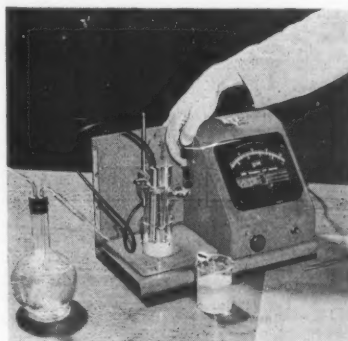
1. *Adequate flats.* The negatives or positives should be sharp and opaque. They should be properly positioned and stripped. Anything which will interfere with proper contact between the flat and the plate will result in halation. No plate can be any better than the negatives or positives used to produce it, and good ones still will produce poor plates if they are not properly utilized.

2. *Adequately trained personnel.* In many plants platemaking is considered a step-child. Despite what some of the presensitized plate manufacturers may tell you, you cannot expect good plates from the office clerk, not even good presentitized plates. Even though the supply industry, by supplying high-grade, quality controlled materials has reduced the number of variables, platemaking still remains an art which requires a high degree of proficiency.

3. *Adequate equipment.* I have not yet seen anyone try to make a 77" plate on a 36" frame, but it wouldn't surprise me. You would not believe some of the things I have seen, even in the platerooms of some of our finest lithographers. I have seen whirlers in use which must have been around at the time of Senefelder. Frames with scratched glass, out-moded arc-lights and inadequate sinks are commonplace. I have been

This article (of which this section is the second and concluding portion) is based on talks given by Mr. Materazzi at the Washington, Baltimore and Dayton Litho Clubs. The author entered lithography in 1940 in the research department of the Army Map Service. He served in the Corps of Engineers and the Office of Strategic Services during World War II, entering as a private and attaining the rank of major, and receiving several decorations. He joined the USAF Aeronautical Chart and Information Center as a graphic arts specialist after the war, before going with Litho Chemical and Supply Co., Inc., five years ago.

asked to demonstrate the copperized aluminum process without a deep-etching table. Waste solutions had to be squeezed off into a tray or on the floor. And I am not referring to bedroom shops but shops which pride themselves on the latest in press



pH Meter

equipment. Naturally the equipment has to be maintained if it is to continue to operate properly.

4. *Adequate space and working conditions.* It is gratifying to note that more and more lithographers are now air-conditioning their plate rooms. Careful control of humidity and temperature is one of the greatest single requirements for good platemaking. It is also one of the most economical controls. The owner of one of the largest and best trade shops in the country has told me that he recovered the entire cost of air-conditioning his plant in one summer by the tremendous reduction of spoiled plates. Control of humidity does not apply only in the summertime. There is such a thing as too little humidity for controlled platemaking. This will occur in the wintertime when the heating system unduly dries the air. The working area should be clean and well lighted. Yellow lights are fine in areas where light sensitive coatings are still on the plate, but provision should be made for white lights in areas where the plate is no longer light-sensitive. Inspection will thus be facilitated.

1. Standards and Specifications

The primary tool employed by modern industries in a quality control program as mentioned before, is standards and specifications. This refers to the end-product. In our case the end product is the finished plate. However, before intelligent standards can be formulated it is necessary to know what is required of the end-



Left: Arrow indicates light integrating meter. Above: LTF register rule.

product. In other words, what do you expect the plate to do?

The first requirement that comes to mind is the press on which it will be used. It will require a plate of a definite size and thickness, which, of course, is easily measured, and for which tolerances are easily set up. Other litho plate requirements can be stated in terms of length of run, type of job to be run, minimum difficulty on the press and whether the plates are to be made from positives or negatives.

In specialty houses which continuously produce one type of job these can be stated in fairly exact terms and thus the selection of the plate to be employed becomes comparatively simple. A careful analysis of the various types of plates available is made and all other things being equal the most economical plate is selected.

In the case of shops doing commer-

cial work, with varying quality and quantity requirements, the establishment of plate standards and specifications becomes more difficult. But even here it is possible to group the jobs in different categories, all the jobs in any one category having similar requirements. A plate can then be selected for each category. Except for trade shops this can usually be limited to two or three types. As we get into the larger press sizes presensitized plates are eliminated from consideration and the choice is narrowed. In any case no program of control of variables will succeed if you put a job on a surface plate one week and put the same job on a presensitized plate the next time it comes around.

2. Inspection

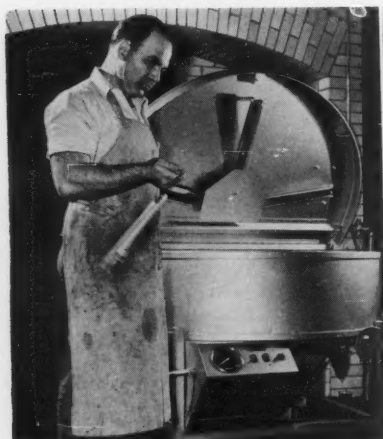
The second tool in a quality control program is inspection of materials and products. The former refers to the raw materials employed; in

platemaking these are the metal and the chemicals used. These should be inspected before use and be compared against established standards. Some features of your materials can be physically measured, for instance the size, thickness, uniformity of thickness and squareness of the plate. Modern presses permit certain tolerance with respect to size and thickness. The squareness of the plate is another matter. A plate which is not square can cause trouble with certain register systems or on web-fed presses where the plates are bent on rather an exact jig.

Similarly, plates which are not of uniform thickness will result in uneven plate wear since pressures have to be adjusted to the thinnest portion of the plate. A sound quality control program would require that the plate be checked before starting the platemaking operation. I do not advocate that this be done for every plate but it should be done at least on a spot check basis or whenever a new shipment of plates is received.

The next thing which should be checked is the plate surface. If you are using presensitized or polymetallic plates this has been done for you under rigid standards by the plate manufacturer. However, the manufacturer, too, can slip up and below standard plates do get through. In addition, once the package has been opened the plates are subject to local conditions and can get dented or scratched. The quality minded platemaker will check them before the first processing step. It takes only a few

Left: Sling Psychrometer. Right: Baume Hydrometer.



moments and may result in a saving of hours.

With respect to grained plates, the inspection problem is more difficult because to date no one has been able to come up with a good simple test for grain. The best way to control grain is to control carefully the graining operation. Abrasive, balls, water, etc., must be measured and each cycle carefully timed. The graining machine must be kept in good adjustment. It is wise to keep sample plates with what is known to be a good grain. Periodically the plates received from the grainer should be visually checked against this standard.

For testing there is no substitute for experience. You will see good platemakers rub the palm of their hand over a grained plate. Over a period of time they get so they can feel a difference in roughness. Scratches, pits, shiny spots all indicate a poor graining job and these can be seen if we train ourselves to look for them.

Once you are sure that the metal plate meets your standards you must next think about the chemicals employed. Since the war there has been a definite trend to packaged chemicals. Very few shops make their own anymore. The responsibility for control of variables in the chemical solutions has thus been passed on to the chemicals manufacturers. By and large they are doing a respectable job. However, it is important to note that they lose control of their materials once they have been shipped.

Even the best of chemicals will deteriorate with age. Thus it is important that you buy in quantities which will be turned over rapidly. Chemicals lying on your shelf are very uneconomical. Not only do you risk spoilage but you also have a lot of money tied up in them which is not earning anything for you. It is all well and good to buy in quantities which will give you a price break provided you can use them in a reasonable length of time.

Chemicals are made to work best at room temperatures. The manufacturer makes all his control tests at specified temperatures. These products will vary in their properties as the temperature changes. If you take

Platemaker uses water-mixing valve.

(All photos on these pages courtesy LTF.)



chemicals from a cold loading platform and attempt to use them immediately you have introduced an unnecessary variable in your operation. It is imperative that you condition them to the temperature of your plate room before using them. When in doubt use a thermometer.

Inspection of our product — the plate — must be a continuing thing throughout the entire platemaking operation. This is not possible unless all plate making operations are standardized. You will not get consistently good plates if you counter-etch one plate five minutes and give the next one a lick and a promise. The same applies to whirler speed and whirler temperature. Deviations from standard conditions very often produce a visual change.

If you perform all operations in the same manner and under uniform conditions a change in a variable not under control can very often be noted. Therefore, you should be inspecting the plate during each step and if you notice a change from past experience find out why the change has occurred.

If you are certain that you are performing in your usual manner yet you still get unusual effects, get in touch with your service man. From experience I can tell that it is always easier to shoot trouble than it is to clear it up once it has reached the press.

The Lithographic Technical Foundation has done an excellent job of

publishing sound platemaking techniques and procedures. In the final analysis, however, the man working with the plate must develop his own technique and powers of observation. There are all sorts of danger signals which will show up when everything is not according to Hoyle. If you train yourself to look for them, you will see them should they occur. This is the best and the cheapest inspection.

Once the plate has been finished there are other inspection and testing practices which should be employed periodically in order to insure that the plate will comply with established standards. Someone should be responsible for checking that the work is correctly placed on the plate. When possible the best way to do this is to check against the proof. This will show up broken letters, sharpness of detail, dirt specks, etc.

On process jobs register marks should be checked in a systematic manner employing either a template or the LTF Register Rule. It is difficult to predict in the plateroom how the plate will perform on the press. Periodically you could put a test plate through a plate destruction process as described by LTF. Here the ink-receptivity of the image is checked by repeatedly washing the plate out, drying down a strong etch over the plate and then rubbing it up. A good surface plate should be able to withstand at least four of these cycles before the

work starts to break up, a deep-etch plate somewhat more. The non-printing areas can be checked for degree of desensitization by rolling the plate up solid and then noting how easily the resulting scum clears up. Again, a well made plate should withstand several of these cycles.

When this technique is used on surface plates note if the number of solid steps in the sensitivity guide increases with each cycle. Should this occur you will know that not all the residual coating has been removed and the plate will have a tendency to scum.

Thumb Test

Apart from these rather elaborate tests there is the thumb test in which you rub your thumb over a part of the image which will not print and note how difficult it is to remove. This is particularly effective with surface plates. On deep-etch plates you can burnish a piece of clear scotch tape over a solid area and then pull it up sharply. If the lacquer is not well adhered it will come off with the tape. A common complaint from pressmen is that the plate is gum streaked. This can be checked easily in the plateroom by merely washing the plate out.

3. Statistics

The third tool used by industry in quality control programs is based on statistical techniques. If you throw a pair of dice often enough, the number of times any given combination will come up can be predicted rather accurately. From this, mathematicians have formulated certain laws of probability.

Bell Telephone scientists found, some years ago, that these laws could be applied to the control of variables. They postulated that variables, both human and mechanical, fall into definite patterns. Therefore, given a large enough sample they could predict with considerable accuracy the number of items produced which would be below standard, the number which would meet standards and the number above standard.

It was found that if tolerances were properly set, and manufacturing conditions were correct, they could chart

the number of items in each category and get a "bell" shaped curve. (This is a graphic way of showing normal variations and is widely employed by statisticians in all fields.) By sampling and inspection, any deviation detected from this curve would indicate that something was wrong. It is a very interesting technique and the mathematics involved have been reduced to chart and graph form. Some advanced printing establishments are using such techniques to control the quality of the printed sheet at the back end of the press. Presensitized plate manufacturers use this tool to control the quality of their product.

As far as I know, no work has been done along these lines with respect to platemaking. However, in most cost control systems used by lithographers a record of spoiled plates is kept which in effect is a statistical system. I have heard varying opinions as to what is a reasonable figure and, as with everything else, the answer depends greatly on the shop and the type of work it does. A good average figure to shoot for is two percent of all production. This figure should include all types of errors: misregister, human failure, metal failure, chemical failure, etc.

4. Inspection Devices

The final tool used in quality control programs is the use of inspection devices. Of course, no device can test the adequacy of a plate nearly as well as the press does. We do, however, have numerous devices available which will go a long way towards insuring that performance will be satisfactory.

I have micrometers to measure the plate thickness, steel rules to measure its size, and protractors to measure its squareness. We can use thermometers to measure temperature of solutions and Baumé scales to measure their density. Adequate graduates are available to measure the volume of liquids and balances to weigh solid chemicals. We have pH meters to establish the acidity or alkalinity of solutions, and there are papers which change color according to the pH.

Our suppliers and chemical manufacturers have other control devices

such as viscosimeters which will indicate how well a coating will flow; spectroscopes to tell them if they have encountered any impurities and devices to measure surface tension.

The LTF has worked for years to develop an instrument which will measure plate grain. One which has received some publicity is a Sheffield instrument which is based on airflow. To date, however, no definite conclusions as to its accuracy have been established. We can, however, always look at the plate grain with a simple magnifying glass or loupe. More accurate measurements are possible by the use of a microscope and a device which permits the counting of peaks in a given area. Such microscopes generally are used by our most advanced suppliers. No quality control conscious plateroom should be without a good hygrometer to measure relative humidity. A more accurate measurement of humidity is obtained with a sling psychrometer. It is possible to make up charts which will show what changes have to be made in exposure to compensate for changes in humidity. If you want to control exposure you must control the intensity of the light and the length of time the plate is exposed to it. To control the time we have accurate timers, to control the intensity we need a voltage control in the arc lamp circuit. The carbons of course have to be kept properly trimmed and the reflectors clean. More elaborate devices are available to control exposure such as light integrators which actually count the amount of light reaching the plate and automatically turn it off when the desired time is reached.

It is possible to buy whirlers which have tachometers on them so that we can tell exactly what the whirler speed is. The better whirlers also have good temperature controls on them. Vacuum frames have gauges on them which tell what the pressure is inside the frame and will also control the pressure.

Mixing valves can be had for water lines which will maintain temperature within desired limits. We can get filtering devices installed for the

(Continued on Page 131)



Calendar Art

*For 1958, as for other years,
it runs the gamut from sex to
safety, as B&B line illustrates*

ONCE again it's time to hang a new calendar and the yearly decision must be made as to which calendar is most suited to the hanger's taste and to the room in which it is to be hung. Fortunately for lithographers, who have a corner on the market, calendars are looked on as necessities by persons in home and office alike, so every year sales soar.

Calendar subjects tend to follow the same pattern year after year, with only minor variations on basic themes. This year, as always, the pictures range from sex to safety, with rural scenes, Boy Scouts, small children, animals, church and home scenes in between.

Some of these themes are presented in the accompanying photos showing just a small portion of the Brown & Bigelow line for 1958. B & B is the world's largest lithographer of calendars, having been started in 1896 in St. Paul. Other lithographers around the country share in this multi-million dollar business. ★

WORK. DRIVE and LIVE SAFELY



P r i n t i n g W e e k 1 9 5 8

ALL around the United States, this month, graphic arts groups are joining forces in the annual celebration of Printing Week. The observance this year runs from Jan. 12-18. Once again, ML has asked its correspondents to supply details of Printing Week in the various sections of the country.

Their reports, presented below, indicate that there are some newcomers among the cities celebrating Printing Week. On the other hand, several cities are not celebrating this year to the extent that they did in former years. Emphasis as usual is on banquets and guest speakers, but increasing activity on TV also is noted. Many cities are concentrating their efforts on telling school children about the fine opportunities which exist in the graphic arts.

In Cleveland, a scholarship program is one of the highlights. New York and Philadelphia have extensive exhibits of regional printing and lithography. In San Francisco, billboards are being used to alert the public to the importance of the industry; and in most cities, tours of printing and lithographing plants are being conducted all week.

Some Litho Clubs are playing a big part in the PW observance, while others have little more than a nominal connection with it. Following are the regional reports:

• Washington, D. C.

Big event will be the annual dinner Jan. 15 at the Hotel Continental. All local graphic arts groups combined to organize the celebration. Speaker at the banquet will be Alden H. Sypher, editor of *Nation's Business*.

• Houston

PW will be celebrated along with International Graphic Arts Education Week in this city. Proclamations have been issued, exhibits in store windows are being readied, and radio and TV spot announcements will call attention to the program.

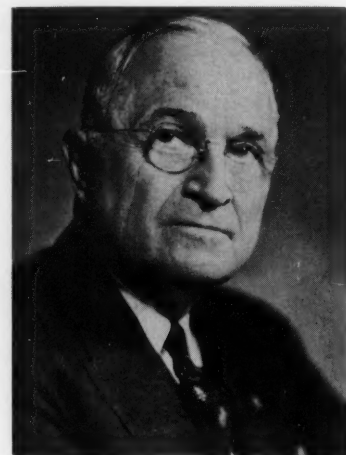
Gulf Printing Co. is holding open house for visitors, as are several other printing and lithographing firms. Printing talks at the local high schools

and the annual banquet Jan. 16 also are on the schedule.—*J. V. Burnham.*

• New York

Meetings, workshops and special ceremonies, sponsored by many organizations in the graphic arts, once again will mark the observance of Printing Week in New York 1958. Starting on Monday, Jan. 13, a full program of events will be tied in with the 16th Exhibition of Printing and the 252nd anniversary of the birth of Benjamin Franklin.

Center of the PW observance in the New York area will be the Hotel Commodore, where many events will be open to everyone associated with the graphic arts as producer or consumer. In addition to a four-day exhibition



Former president Harry S. Truman, who will accept Franklin Award and address New York Printing Week banquet.

of outstanding printed pieces sponsored by the New York Employing Printers Association, Jan. 13-16, the highlight event of the week will be the presentation of the printing industry's Franklin Award to former president Harry S. Truman. Mr. Truman will accept the award and make the principal address at the annual Printing Week Dinner Tuesday evening, Jan. 14, in the grand ballroom of the Commodore.

Another feature of the dinner will be an appreciation of Franklin delivered by Dr. John Christian Warner, president of the Carnegie Institute of Technology.

After the official City Hall Printing Week ceremonies at noon on Monday,

there will be a ribbon-cutting ceremony at 3 in the East Ballroom of the Commodore, marking the opening of the largest exhibition of printing ever sponsored by the industry in New York.

Almost a thousand pieces of printing, produced by every process and selected by a 10 member board of judges, will be on display from noon to 10 p.m. through Thursday, Jan. 16. All uses of printing will be represented, from advertising folders and annual reports to books and point-of-purchase displays.

First of the week's panel sessions, sponsored by the Advertising Agency Production Club of New York and the Associated Printing Salesmen, will be held Monday evening at 7 in Parlor B-C of the Commodore. It will be devoted to a review of the printing exhibition by members of the board of judges.

Chairman of the panel will be Melvin Loos, adjunct professor of graphic arts at Columbia University, who will be assisted by Louis Leon, president of the Advertising Agency Production Club of New York; O. Alfred Dickman, advertising production manager of the New York Herald Tribune, and other judges.

The American Institute of Graphic Arts will sponsor a program Wednesday evening at 7 in the same location and will present research, production and engineering specialists of Time, Inc. in a panel session on things to come in the printing field.

On Thursday, at the same time and place, the New York chapter of the Public Relations Society of America will sponsor a workshop on "Choosing the Tools" to do effective public relations work with printed matter. Public relations spokesmen for the American Iron and Steel Institute will comprise the panel.

Motion pictures will be shown at 6 p.m. prior to the panel sessions on Monday, Wednesday and Thursday. Films include "Color Magic," an Interchemical Corp. film on the use of color, and "Promise of the Trees," a Weyerhaeuser Pulp and Paper Co. motion picture on the production of paper.



San Francisco Printing Week committee members: Standing (l.-r.) Neil MacNeil, Frank Kane, Herman Schunter, Ramsey Oppenheim, Tal Rice, Richard Conlan, and William McLaughlin. Seated, (l.-r.) S. F. Schoenfeld and Robert Franklin, PW general chairman.

Related events during Printing Week will include a full program of observances at the New York School of Printing and the annual meeting and luncheon of the International Benjamin Franklin Society on Saturday, at the Commodore.

The presentation of the Franklin Award to Mr. Truman will mark the second time the printing industry's highest honor has gone to a chief executive. In 1956 the medal was awarded to President Eisenhower and was accepted in his behalf by Charles E. Wilson, then secretary of defense.

•

San Francisco

The Northern California Graphic Arts Association, established last year to promote area-wide observation of Printing Week, is this year collecting funds to be distributed among the three participating San Francisco Bay Area organizations. The Association also is arranging for 25 Printing Week billboards to be placed throughout the area. Herman Schunter, head of the W. P. Fuller Company printing plant, is president.

In San Francisco, activities are under the chairmanship of Robert Franklin of Ben Franklin Press. The week's theme is "Everyone Uses Printing." A competition among the city's printers and lithographers is being held under the chairmanship of Albert Mattson of the Bookbinders' Union. All categories of material, from direct mail pieces to books, will be judged

for technical reproduction, design, appearance and composition. Winners will be announced and exhibited at the Ad Club's Printing Week luncheon Jan. 15.

Serving as San Francisco publicity chairman is S. F. Schoenfeld, Zellerbach Paper Co. Richard Conlan, of Conlan Printers & Lithographers, is in charge of exhibits and displays. Ivan Brandenburg of the Amalgamated Lithographers is in charge of finance. Ernest Wurthman of Schmidt Lithograph Co. is arranging for speakers to address various clubs and service groups. Bud Apman of Stecher-Traung Lithograph Co. is in charge of the Ad Club luncheon, and Albert Worner of Security Lithograph Co. is in charge of civic functions.

In the East Bay, William Kitto of Pacific Rotaprint Co., lithographers, is general chairman. Exhibits of printing, lithography and screen process printing are being held in the various East Bay communities, and graphic arts representatives are giving talks on their industry to local groups. At the Oakland Ad Club's luncheon honoring Printing Week, John Barry of the California Ink Co. will discuss new processes which have been introduced locally in recent years. A banquet (with no speeches) and dance are being held for industry members at the Shattuck Hotel, Berkeley.

On the San Francisco Peninsula, Howard Schonberger of the *Palo Alto Times* is general chairman. A high school contest for Printing Week post-

ers is being held under the joint chairmanship of James S. Nute of the National Press, Palo Alto lithographic firm, and James C. Worden of Wilson-Rich Paper Co. Arthur F. Inman of Peninsula Lithograph Co., Redwood City, is in charge of finances.—*Ruth Teiser and Catherine Harroun.*

Milwaukee

A Ben Franklin Banquet January 13 will open the 1958 celebration, the annual salute to this cities' third largest industry. John Scott, assistant to the publisher of *Time*, will be the main speaker at the annual dinner meeting in the Crystal Ballroom of the Schroeder Hotel. He will discuss "Asian Dilemmas" before a joint meeting of members of 16 Milwaukee graphic arts, advertising and sales clubs, including the Litho Club.

Also featured at the dinner will be "Miss Printing Week" of 1958 and her court-of-honor. These five girls were chosen by industry judges at a contest held in December.

Other Milwaukee activities are a printing exhibition; manufacturers displays in downtown store windows, distribution of educational material to schools and libraries and plant tours.

Philadelphia

Bennett Cerf, publisher and TV panelist, will be the main speaker at the "Best of the Year" dinner Jan. 16. The exhibits will represent the finest printing and lithography turned out in the Delaware Valley.

A "Man of the Year" will be chosen from industry members. Numerous cocktail parties and special dinners are planned, with the Benjamin Franklin Hotel scene of most of the activities.

The Litho Club again is cooperating with the committee planning the local celebration.

Baltimore

The Franklin Day dinner and dance is the local feature of PW. Sen. John Marshall Butler, of this state, will be guest speaker. The program is scheduled for the Sheraton-Belvedere Hotel, Jan. 16.

The PIA Self-Advertising Awards will be on display before the dinner.

St. Louis

The Graphic Arts Association of St. Louis, and the St. Louis Club of Printing House Craftsmen are joining forces for Printing Week.

A series of plant visits will be held each evening of the week, except Wednesday. On that night the two groups will sponsor a banquet for members and friends. Ferd Voiland, of Topeka, Kansas, president of the International Association of Printing House Craftsmen, will be guest speaker.

Plant tours will be open to everyone, to acquaint the public with the various phases of graphic arts.

There will also be displays in the public library, Stix, Baer & Fuller—downtown department store—and the street level windows of Boatmen's Bank.

Each of the three trade schools, Hadley, O'Fallon, and Rankin will prepare displays to show the community the educational opportunities available in graphic arts.

Harold Axtell, president of the St. Louis Club of Printing House Craftsmen, and Fred Winsor, executive vice president of the Graphic Arts Association are working together on printing week plans. George Enberg is chairman of the week's program, and Warren Wipperman is assistant.—*Mildred Weiler.*

Chicago

Printing Week will be observed in Chicago this year in a much more subdued way than in former years. The official, nationwide week of Jan. 12-18 in fact, is being almost completely passed up by the Chicago Craftsmen's Club. Mayor Daley has issued the customary proclamation calling attention to Chicago's position as "the nation's leading graphic arts center" and the traditional wreath laying ceremony will be carried out at the Franklin statue in Lincoln Park.

Otherwise the Chicago club will wait until the regular monthly meeting on Jan. 21 to stage its official Printing Week program. Following dinner at the Furniture Club, a guest speaker will address the club. Socially, the special feature of the evening will be a "Carnival of the Graphic Arts," for which supply firms will set up some 20 booths.

"It was felt," said the general chair-

(Continued on Page 127)

Viewing the gallery of GAA of Wisconsin Presidents from 1886 to 1957 are six GAA Presidents: (l.-r.) L. E. Oswald, the E. F. Schmidt Co. (1957); E. J. Brumder, North American Press (1951, 1952); Walter F. Zahn, retired (1937, 1938); Paul W. Hammersmith, Hammersmith-Kortmeyer Co. (1928, 1929); John A. Bell, Sentinel Printing & Binding Co. (1953, 1954); and E. E. Radloff, C. B. Henschel Mfg. Co. (1955, 1956).



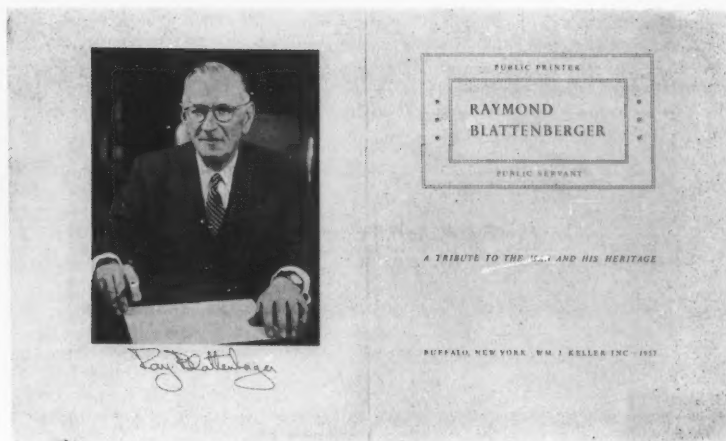
RB

Raymond Blattenberger

'A Tribute to the Man and His Heritage'

Book Review

RAYMOND BLATTENBERGER, A TRIBUTE TO THE MAN AND HIS HERITAGE; Buffalo, N. Y., Wm. J. Keller, Inc., 32 pp., two photos. Story gathered by Penn R. Watson, Sr., of Wm. J. Keller, Inc., with an introduction by him. Edition of 250 numbered copies composed in 16 pt. Bembo type and printed on Curtis Rag paper. Illustrations by Velvaton lithographic process. One copy printed on English handmade paper for binding in full Niger morocco leather by Miss Elizabeth Kner, of Chicago.



EVERYONE must know that Raymond Blattenberger is the man who returned \$13 million to the U. S. Treasury as surplus from the operating expenses of the U. S. Government Printing Office. And many know of his notable career at Edward Stern and Co., in Philadelphia. Still others are familiar with his civic and church activities and about his family.

Few, however, know the whole story about the 15th Public Printer of the United States, and it is the purpose of this loving tribute to present the complete details of Mr. Blattenberger's career.

Credit is due Penn R. Watson, Sr., for taking many months to prepare the Blattenberger story, based on material drawn from many sources, and to lithograph the volume in a beautiful limited edition. The 16-point Bembo type is amply leaded, with full margins in which are placed brief tributes from Mr. Blattenberger's friends. The initials "RB" appear at the top of each page, with the words "Public Printer" at the top of left hand pages, and "Public Servant" at the top of right hand pages.

From Mr. Blattenberger's first job as a press feeder at the age of 14 to his reluctant acceptance of the job as the nation's top printer in 1953, the book fills in the background of his work, his family and his civic and church activities. "There is something about printing which brings out the best in a man," the volume concludes. "Not only makes him love and respect it but also makes him want to give back to it something more than it gave him. This Raymond Blattenberger did."★

“... thanks for the successful solutions to my problems”

SEVERAL months ago reader Samuel Rice, in Far Rockaway, N. Y., asked a series of questions on camera problems which were bothering him in his shop. Herbert P. Paschel, our Photo Clinic columnist, suggested solutions. It wasn't long before Mr. Rice wrote back, telling Mr. Paschel that he had applied the solutions and all were successful! Following are some excerpts from Mr. Rice's letter:

“...in accordance with your suggestion I checked the bed and found it off level. A check of the ground glass, lensboard and copy-board showed that these were also not at true right angles to the bed. The camera manufacturer sent his mechanic to correct the faults and now the horizontal center position re-

mains the same in all camera focuses . . .

“...as you stated dust was being created in the dark room by the operation of an air exhaust fan. I shut this down while making positives and this, together with the anti-static cloth you suggested, has eliminated the problem (of dust spots on contact positives).

“...on the problem of difficulty in closing highlights, I replaced the troublesome lens . . . and my results now are perfect. When I am plagued with pinholes, I add a wetting agent to the developer, as you suggested, and it overcomes the problem . . .

“...thanks for the successful solutions to my problems.”

In past months, many of you have availed yourselves of the services of our two regular columnists, *Theodore C. Makarius* (Press Clinic) and *Herbert P. Paschel* (Photographic Clinic). The purpose of this page is to remind you that if you have a troublesome problem regarding press or camera, these specialists are ready to help you solve it. If you are a subscriber to ML and have a question, why not jot it down on the coupon below and send it along to us? We'll be glad to help you, and the service is free.

MODERN LITHOGRAPHY

Box 31, Caldwell, N. J.

☐ **Mr. Makarius**
(Press)

☐ **Mr. Paschel**
(Photography)

My Question: _____

(Questions will not be answered by mail, but in an early issue of Modern Lithography)

(Only your initials will be used)

Name

Company

Address

50

Mendle Printing Company

celebrates anniversary in St. Louis

By *Mildred Weiler*
St. Louis Correspondent

MENDLE Printing Co., founded in 1907 by Isador Mendle on the St. Louis riverfront at Locust St., is observing its 50th anniversary. In 1907 the plant was proud of its eight job presses and a hand fed pony press.

After two progressive moves, first to larger quarters at 8th and Locust and then to a six-story building at 3rd and Locust, the company moved into its own 45,000 sq. ft. building at 8110 Eager Road in St. Louis county in 1947.

With emphasis today on offset, this all-on-one-floor operation soon became inadequate and two years ago another 12,000 feet were added. Plans now include another addition this year.

Color Predominates

Maurice Mendle, president of the company and son of the founder, says his company does a lot of color work and has its operation geared to a middle of the road price structure and quality.

Equipment, for instance, is replaced every five years. "We feel that

the changes made in a press or some other equipment, are not very great in one year, but in five years there are enough changes to make the replacement necessary," Mr. Mendle said. Some things such as light tables, however, are not changed so frequently.

The company's three-shift operation with equipment running around the clock, puts a strain on the machinery and is another reason for prompt replacement rather than repair.

Double Grain Plates

The company makes its own plates, and color separations. "We double grain our plates," Mr. Mendle said. "We find this makes them very receptive." The extra time and cost that might be involved in double graining is more than made up in saving on press time and remakes often necessary on plates that are not double grained, he pointed out.

The floor plan for the operation is one production line which runs 550 feet long with one turn.

All the officers and employees of the

company take an active part in civic and community life, Mr. Mendle pointed out, and this too, is a major factor in the company's success.

Observance of the 50th anniversary has been through gold labels on all mail and on the company's monthly direct mailings.

Direct Mail Successful

Over a period of eight years the direct mailings have been the company's major advertising promotion. This year a card inserted with one mailing brought a 19 percent return.

Other officers are Milton Mendle, executive vice president; Joseph Ebeling, II, vice president in charge of sales; Philip Isserman, vice president in charge of production; Elmer Bruning, secretary-treasurer; E. L. Mathis, vice president; and Thomas Vesperany, general manager.

The company does a variety of offset work in black and white and four-color, including publications, brochures, book covers, catalogs, labels and boxes and packages.★

View of modern plant of Mendle Printing Co., St. Louis, which is celebrating its 50th anniversary



the Halftone Screen and a Ratio Line

By Gyan P. Madan
Instructor in Photolithography,
Carnegie Institute of Technology,
Pittsburgh, Pa.

WITH the exception perhaps of gelatine process, an image with continuous tone gradation, such as a photograph containing highlight and shadows, cannot be reproduced identically by the typographic or planographic printing processes as these give only two tone values, the tone of the ink and that of the bare paper, with no intermediate gradation.

In order to reproduce by one or the other of these processes, it is necessary to transform a continuous tone image into an image consisting of very small elements of the same tone value but of different size according to the gradation differences of the original copy.

This breaking up of the image into dots of varying sizes according to the tonal value required is accomplished by means of a halftone screen which is used in the camera directly in front of the photographic plate or film at a certain distance.

Need Exact Dot

The most important point about perfect halftone reproduction is that the formation of the dot should be exact and accurate. Because of wide variety both in equipment, methods and materials it is not possible to establish a standard technique in halftone work. In fact in every phase of work a different type of dot will be required, and to obtain a dot formation of a certain character necessitates the understanding of some basic factors.

Points outlined here are to indicate a simple method of working and

should be considered as a guide for making black and white halftone or color separation halftone negatives.

Many theories have been advanced to explain the effect of dot formation obtained by the standard glass cross line screens. The two main theories explaining this effect are the Penumbra Shadow Theory and the Diffraction Theory. Both these theories are quite involved and in some cases contradictory. Since the aim of this article is to provide practical working information, a detailed discussion of these theories will be avoided.

Screen Distance

While screen negative making for letterpress and offset printing has reached a high level of quality and output, there is still very much uncertainty with regard to the factors of screen distance and lens stop which affect the dot formation to an appreciable extent.

The light reflected from the illuminated copy is picked up by the lens. The lens in turn projects to the photographic emulsion surface cones of light which the halftone screen, when placed at a fixed distance, intercepts before they reach the sensitive emulsion surface.

By placing the screen at different distances from the photographic emulsion, (but with a fixed camera extension), the cones of light are intercepted at different points. Experience has shown that the effect produced at these different points of interception will not be the same.

On the other hand, with a fixed

screen distance, changes in the diameter of the lens opening will produce cones of light which will be narrower or wider. All this means that only one screen and one lens aperture setting for a certain camera extension can be basically correct.

Experience has shown that there are four factors involved in setting the camera to obtain the proper dot formation. These factors are:

1. The size of lens aperture or "stop".
2. The distance from the stop to the sensitive plate, or "camera extension".
3. The distance from line to line of the screen, or "screen aperture."
4. The distance from the screen lines to the sensitive emulsion surface or the "screen distance."

Factors Related

Furthermore, a definite relationship exists among these four factors. Any change in one of them will require a change or the resetting of the other three in order to obtain correct dot formation of the screen image. These four factors can be divided into two main groups each containing one aperture and a distance. That is, one group consisting of lens aperture and the distance from the stop to the sensitive emulsion surface or the "camera extension," and the other group consisting of "screen aperture" and "screen distance." In order to obtain the correct dot formation the ratio between these two groups should be balanced and can be represented by the following equation which is known as "screen equation":

Diameter of Lens Aperture	=	Screen Aperture
Camera Extension		Screen distance

From this relationship, ratio lines have been determined by means of which, at a fixed screen distance, the lineal dimensions of the lens diaphragm are changed with each variation of the camera extension in a proportion equal to the ratio of the screen aperture.

Ratio Line

Thus a ratio line can be defined as the ratio between the camera extension and lens opening. It is determined by the focal length of the lens and the largest opening of the lens diaphragm.

The most common ratio lines used in the industry in the United States and abroad are 64 and 90, (the latter requiring twice the exposure of the former). Practical working conditions have shown that the negatives made under either of these two ratio lines will exhibit no difference whatever in quality.

Availability of the two ratios is a great convenience but under the following circumstances the use of 64 ratio generally is preferred:

1. When the photographic material is slow,
2. When copy is dark and requires longer exposures, or
3. For average line copy, when the lens aperture $f/32$ is chosen for same size reproduction. The relation of the diameter of the lens aperture to the camera extension in this case is 1:64. This same ratio can be adhered to for the halftone reproductions, of any sizes for all but the coarser screens.

The use of the 1:90 ratio is convenient when:

1. The intensity of illumination is greater,
2. The copy is very light, or
3. The sensitive material is faster.

The change from 1:64 ratio to 1:90 ratio requires lengthening of the screen distance accordingly.

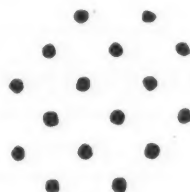
After the image is focussed it becomes necessary for the halftone

screen to be placed at the correct distance from the sensitive emulsion surface. Screens of various rulings require different distances from the sensitive emulsion. Since the dot formation is dependent on the correctness of the screen distance, care must be exercised to get the screen separation exact. When the screen is placed too close to the sensitive emulsion surface the dots will be too small in the highlights and too large in the shadows. On the other hand if the screen is placed too far from the sensitive emulsion surface a fuzzy dot is produced which overlaps in the highlights and is weak in shadows.

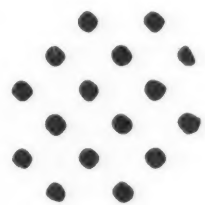
The following diagrams will make the above explanation more simple:

Shadow Area Dots

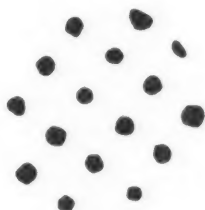
(Effect Produced in Negative)



Correct Screen Distance

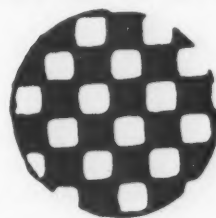


Screen Distance Too Close

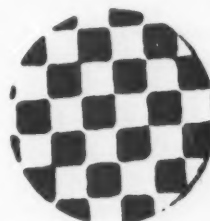


Screen Distance Too Far.

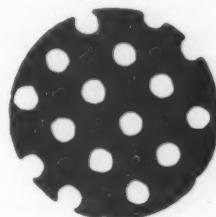
Highlight Area Dots (Effect Produced in Negative)



Correct Screen Distance



Screen Distance Too Close



Screen Distance Too Far

Thus it is obvious that an incorrect screen distance, although it may alter the contrast of the halftone negatives, will produce halftone negatives that are not a true reproduction of the original tone scale; nor will the dot structure be perfect. The simplest way of finding the screen separation for any given screen is to make use of the following formula:

$$\text{Screen Distance} = \frac{\text{Screen Aperture} \times 64 \text{ or } 90}{1}$$

For example the screen distance for 120 line screen, using 1:64 ratio in the scale of 64th of an inch, will be as follows:

$$\text{Screen distance} = \frac{1}{240} \times 64 \times 64 = 17$$

And the screen distance for the same screen, using 1:90 ratio in the scale of 64th of an inch, will be:

$$\text{Screen distance} = \frac{1}{240} \times 90 \times 64 = 24$$

On the basis of the above formula the screen distances for different screen rulings in the table at the right have been calculated and found to be very satisfactory when working with the 1:64 or 1:90 ratio line.

The screen distances given in our table are on the basis of calculations made from the surface of the cover glass. The actual screen distance is measured from the ruling itself (center of the screen) to the emulsion surface. When calculations are made from the surface of the cover glass, allowance must be made for the thickness of this glass. Thickness of the cover glass varies with the size of the screen and is marked on the cover glass side of the screen by the manufacturer. This marked side must always be placed facing the sensitive emulsion.

In case the cover glass is not marked, the thickness generally is accepted as 3/32". One third of this, or 1/32", is subtracted because the cover glass is 2/3 more dense, optically, than air,

Table Of Screen Distances in 1-64" Scale

SCREEN RULINGS	1:64 ratio	1:90 ratio
60	34	48
65	31	45
80	26	36
85	24	34
100	20	28
120	17	24
133	16	21
150	13	19

and thus affects the transmission of light.

Finally, a halftone negative may be obtained in one exposure or by means of the partial exposures through several apertures, when using either 1:64 ratio line or 1:90 ratio line. In each case correct adjustment of the lens opening is very important for obtaining the correct formation of the halftone dots. Many of the several automatic devices are commercially available but in the absence of such automatic controls, hand adjustments can be accurately made by the help of the table below.

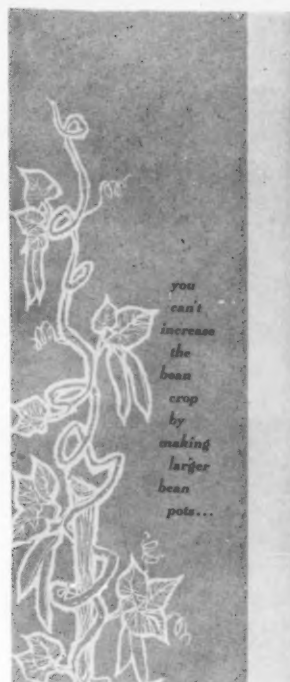
The relationship between the high-light, middletone and detail exposure generally is found to be 1-2-4 respectively. The flash exposure which is given as an auxiliary exposure to obtain a fine pinpoint dot in the shadow portions of the subject by means of the light reflected from clean white paper can be made on either of the two stops given in the table. The time of flashing generally depends upon the nature of the copy to be photographed, the size of the dot desired and the photographic material employed.★

Scale of Enlargement
↑
Scale of Reduction
↓

RATIO 64

Correct Apertures					
HIGHLIGHT	MIDDLETONE	DETAIL	FLASH		
4.0	f:9.5	f:11.5	f:16.5	f:22.5	f:32.5
3.5	f:9.75	f:11.75	f:16.75	f:22.75	f:32.75
3.0	f:11.0	f:16.0	f:22.0	f:32.0	f:45.0
2.75	f:11.25	f:16.25	f:22.25	f:32.25	f:45.25
2.5	f:11.5	f:16.5	f:22.5	f:32.5	f:45.5
2.25	f:11.75	f:16.75	f:22.75	f:32.75	f:45.75
2.0	f:16.0	f:22.0	f:32.0	f:45.0	f:64.0
1.75	f:16.25	f:22.25	f:32.25	f:45.25	f:64.25
1.5	f:16.5	f:22.5	f:32.5	f:45.5	f:64.5
1.25	f:16.75	f:22.75	f:32.75	f:45.75	f:64.75
1.0	f:22.0	f:32.0	f:45	f:64	f:90
.75	f:22.25	f:32.25	f:45.25	f:64.25	f:90.25
.66	f:22.5	f:32.5	f:45.5	f:64.5	f:90.5
.50	f:22.75	f:32.75	f:45.75	f:64.75	f:90.75
.33	f:32.0	f:45.0	f:64.0	f:90.0	f:128
.25	f:32.25	f:45.25	f:64.25	f:90.25	f:—
.20	f:32.5	f:45.5	f:64.5	f:90.5	f:—
.12	f:32.75	f:45.75	f:64.75	f:90.75	f:—
.10	f:45.0	f:64.0	f:90.0	f:128	f:—
—	f:45.25	f:64.25	f:90.25	f:—	f:—
—	f:45.5	f:64.5	f:90.5	f:—	f:—
—	f:45.75	f:64.75	f:90.75	f:—	f:—
—	f:64.0	f:90.0	f:128	f:—	f:—

RATIO 90



Imagination and Service

... ARE the key words in a direct mail promotional campaign underway at Linocraft Inc., advertising typographers, New York. The mailings, some of which are illustrated here, began in November. They are continuing this month and next to executives of advertising agencies and other industries.

One color (blue or red) and black are used on the folders, which bear such imaginative lead in lines as "Screening the Aardvark," "Let's Stick It in the Cyclotron and See what Pops," and "You Can't Increase the Bean Crop by Making Larger Beans."

Copy stresses the service which Linocraft provides, by finding errors before copy is set and double-checking all material during the process. Art work is attractive and to the point. Copy flows smoothly and is quite literate, and type faces are specified in each case. Overall effect is quite striking, and could profitably be emulated by lithographers planning promotion pieces.★



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Correct Apertures

Scale of Enlargement ↑	RATIO 64	HIGHLIGHT MIDDLETONE DETAIL FLASH				RATIO 90	
	4.0	f:9.5	f:11.5	f:16.5	f:22.5	f:32.5	—
	3.5	f:9.75	f:11.75	f:16.75	f:22.75	f:32.75	—
	3.0	f:11.0	f:16.0	f:22.0	f:32.0	f:45.0	—
	2.75	f:11.25	f:16.25	f:22.25	f:32.25	f:45.25	—
	2.5	f:11.5	f:16.5	f:22.5	f:32.5	f:45.5	4.0
	2.25	f:11.75	f:16.75	f:22.75	f:32.75	f:45.75	3.5
	2.0	f:16.0	f:22.0	f:32.0	f:45.0	f:64.0	3.0
	1.75	f:16.25	f:22.25	f:32.25	f:45.25	f:64.25	2.7
	1.5	f:16.5	f:22.5	f:32.5	f:45.5	f:64.5	2.5
	1.25	f:16.75	f:22.75	f:32.75	f:45.75	f:64.75	2.2
	1.0	f:22.0	f:32.0	f:45	f:64	f:90	2.0
	.75	f:22.25	f:32.25	f:45.25	f:64.25	f:90.25	1.75
	.66	f:22.5	f:32.5	f:45.5	f:64.5	f:90.5	1.5
	.50	f:22.75	f:32.75	f:45.75	f:64.75	f:90.75	1.25
	.33	f:32.0	f:45.0	f:64.0	f:90.0	f:128	1.0
	.25	f:32.25	f:45.25	f:64.25	f:90.25	f: —	.75
	.20	f:32.5	f:45.5	f:64.5	f:90.5	f: —	.66
	.12	f:32.75	f:45.75	f:64.75	f:90.75	f: —	.50
	.10	f:45.0	f:64.0	f:90.0	f:128	f: —	.33
	—	f:45.25	f:64.25	f:90.25	f: —	f: —	.25
	—	f:45.5	f:64.5	f:90.5	f: —	f: —	.20
	—	f:45.75	f:64.75	f:90.75	f: —	f: —	.12
	—	f:64.0	f:90.0	f:128	f: —	f: —	.10
Scale of Reduction ↓							



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Color Consistency Is Big Problem

THE job of successful color reproduction is a big one and breaks down into two main phases:

1. The right colors must be obtained in the reproduction.
2. These colors must be printed consistently on the press.

The first phase is being studied in the LTF Color Program. The second phase is the subject of studies on statistical quality control.

Two main reasons for problems in color reproduction are inks and papers. Our color process inks are far from being ideal in color qualities. Most yellows are satisfactory; magentas, however, which should reflect all the blue and red light and absorb all the green light, actually, absorb some red and blue light so they are gray and contaminated with yellow. Cyans, too, should reflect all the blue and green light and absorb all the red. Our best cyan absorbs enough blue and green to gray the color and contaminate it with yellow and magenta. That is the reason for most color correction—to remove the yellow from the magentas and the yellow and magentas from the cyans. The better the colors the less the correction necessary. This is especially important when the correction is done photographically by masking.

Another serious problem in color reproduction is the effect of the paper

Abstract from a tale by Michael H. Bruno, Research Manager, Lithographic Technical Foundation, at recent meeting of Canadian Lithographers Association, Mont Tremblant, Quebec.

on color. The paper affects tints differently than it does solids so that tints of a color require different amounts and kinds of correction than the solids do. This differs with different papers, being most serious on uncoated papers.

The LTF color program already has provided means for determining the gamut of colors which is possible with a particular combination of paper and inks by the use of the LTF color chart. It has also provided a new and unique way of specifying and plotting colors using the LTF color circle illustrated in Research Progress No. 38. Ink colors are specified by new terms such as hue error, grayness and efficiency. How to calculate and plot these values is described in the Research Progress article.

Color Survey

The LTF color strip, consisting of 21 steps of the solid colors, overlaps of two, three, and four solids, 25 percent, 50 percent and 75 percent tints of each color and overlaps of the three tints, was sent to 110 plants in an LTF color survey. Two hundred and twenty-nine printed strips have been returned. Analysis of these strips has revealed the following facts about color printing in our industry:

1. All the yellows, with the exception of a few with our special label jobs, have good color qualities.
2. All the magentas in use are poor. Their hue is too close to red. More

than 75 percent of the magentas analyzed had over 50 percent hue error.

3. Cyans were slightly better but most of them were too gray.

4. Efficiency of yellows was about 95 percent. The best cyans and magentas had efficiencies of 80 percent, but the average inks had efficiencies about 60 percent.

5. Only two strips showed sets of inks which were balanced and could have been corrected with a simple single mask.

6. The industry is making little effort to control trapping and additivity of the overprinted colors. Red overprints were fair, but the scatter of blue and green overprints was like a shotgun pattern. No effort was being made to print neutral gray with the three colors.

7. Printing for some of the four-color presses showed better trapping and additivity of colors than some of the single- and two-color presses. This shows promise of improved printing for multi-color presses when all the facts are known.

Things To Do

As a result of the color survey and work already done on the LTF color program, following are things that can be done now to improve color reproduction:

1. *Use better inks.* Ink manufacturers now are producing balanced sets of inks which have low hue error, high efficiency (70 percent - 80 per-

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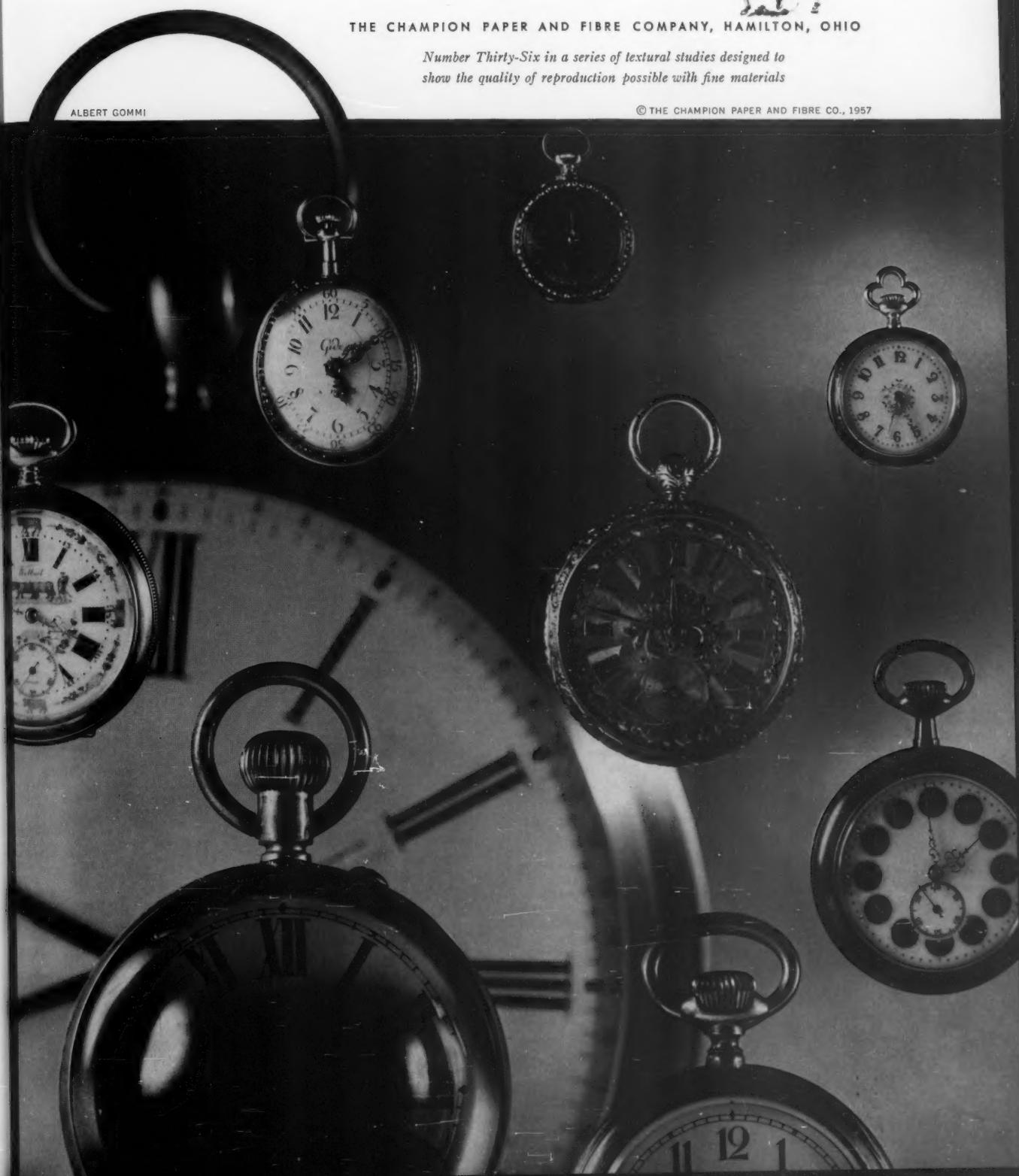


THE CHAMPION PAPER AND FIBRE COMPANY, HAMILTON, OHIO

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show the quality of reproduction possible with fine materials*

ALBERT GOMMI

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Jacksonville	The Jacksonville Paper Co.†	NEBRASKA			SOUTH DAKOTA		
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Atlanta	The Whitaker Paper Co.†	Concord	John Carter & Co., Inc.			Paper Co.
Macon	The Macon Paper Co.	NEW JERSEY			Memphis	Taylor Paper Company
Savannah	The Atlantic Paper Co.	Newark	Central Paper Co.	Nashville	Bond-Sanders Paper Co.
			Trenton	Central Paper Co.			
IDAHO								
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ILLINOIS			Albuquerque	Carpenter Paper Co.	Amarillo	Kerr Paper Co.
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		Dwight Brothers Paper Co.†	NEW YORK			Dallas	Carpenter Paper Co.
		Parker, Schmidt & Tucker Paper Co.	Albany	Hudson Valley Paper Co.	El Paso	Carpenter Paper Co.
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cent for magentas and cyans) and the magentas and cyans are balanced in their blue-green reflectance so that their errors can be corrected by a single simple mask of the green filter separator on the yellow printer.

Print LTF Chart

2. *Print the LTF color chart on the different papers and ink combinations you use in your plant.* This shows the complete gamut of colors possible to print with these combinations.

3. *Print the LTF color strip on each color job.* Densitometric measurements made on the color strip can be used to calculate and plot for each color and overprint, hue error, grayness, efficiency, trapping, additivity, proportionality failure, and departure from neutral gray. The color strip is the real control on each color job.

4. *Calculate masking requirements for the inks and papers used by densitometric measurements made on the color strip.* How to do this is described in LTF Bulletin 320—The LTF Color Chart.

Will Improve Color

Doing these things now will help you get better colors in your reproductions. How to get these colors consistently from sheet to sheet is a problem of statistical quality control. Checking the colors on periodic sheets is not the answer. It will tell you the variations you have, but you won't know how to eliminate them until you know their cause. For statistical quality control to be successful you must first control the quality of your raw materials; second, your whole process must be completely standardized or controlled; and third, you must check your product periodically. This is a bigger job than most people think. It is being studied at the LTF lab and we hope to have more real answers before too long. The important thing is for lithographers to be aware of these problems and know that something is being done about them. When results are gained you'll be in better position to understand and use them. ★

TECHNICAL BRIEFS

These abstracts of important current articles, patents, and books are compiled as a service of the Lithographic Technical Foundation, Inc. They represent statements made by the authors and do not express the opinions of the abstractors or of the LTF.

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Photography, Tone and Color Correction

***EMULSIONS SENSITIZED FOR HALFTONE PATTERNS.** U. S. Patent 2,742,833, June 29, 1951. R. M. Evans, R. E. Stauffer and H. C. Yutzy (Eastman Kodak Co.). *Photographic Abstracts*, part 4, 1956, page 248. A halftone pattern is printed on a blue-sensitive, lithographic emulsion in the form of a green-sensitizer solution. The dye is applied near the centre of the dots only, so that it diffuses somewhat and the induced sensitivity at the edges of the dots is lower. Exposure through a blue filter will produce a continuous tone image only, a green or yellow filter a halftone image. The possibility of imprinting a green-sensitive 50-line screen (for newspapers) and a red-sensitive 120-line screen (for magazine copies) is considered.

***ATTEMPT TO CLASSIFY THE VARIOUS TYPES OF MASKS.** G. Muleau. *Le Procédé*, 52;56-62, July-August, 1956; *Bull. Bibliographique Kodak-Pathe*, p. 5, No. 737, Aug. 14, 1956 (In French); *Monthly Abstract Bulletin*, vol. 43, No. 2, February, 1957, page 77. Definitions are given for premasks and final masks; and first-, second- (masked masks), and third-order

masks are defined and discussed. Their production and use for correction of color separations for three- or four-color work are considered, as well as their application to photolithographic prints on small office machines.

***RECENT DEVELOPMENTS IN THE THEORY OF COLOR PHOTOGRAPHIC REPRODUCTION.** W. T. Hanson, Jr. *Sci. et ind. phot.*, (2)27: 498, December, 1956; *Monthly Abstract Bulletin*, vol. 43, No. 2, February, 1957, pp. 117, 118. Most of the theoretical work in the field of color photographic reproduction has been based on the assumption that, for "exact" color reproduction, the tristimulus values of the reproduction must be equal to those of the original subject. It is not yet possible to establish the specific requirements for obtaining "exact" color reproduction with a subtractive process, but for any given set of dyes and emulsion sensitivity distributions which might be used in a subtractive process, it is possible to calculate the masks which would be required in obtaining minimum reproduction errors for any number of selected subjects. After making such calcu-

(Continued on Page 129)



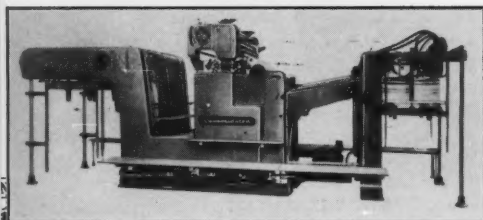
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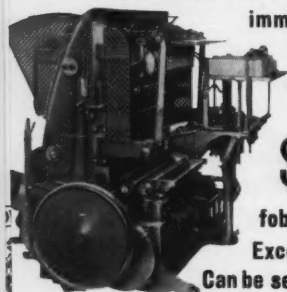
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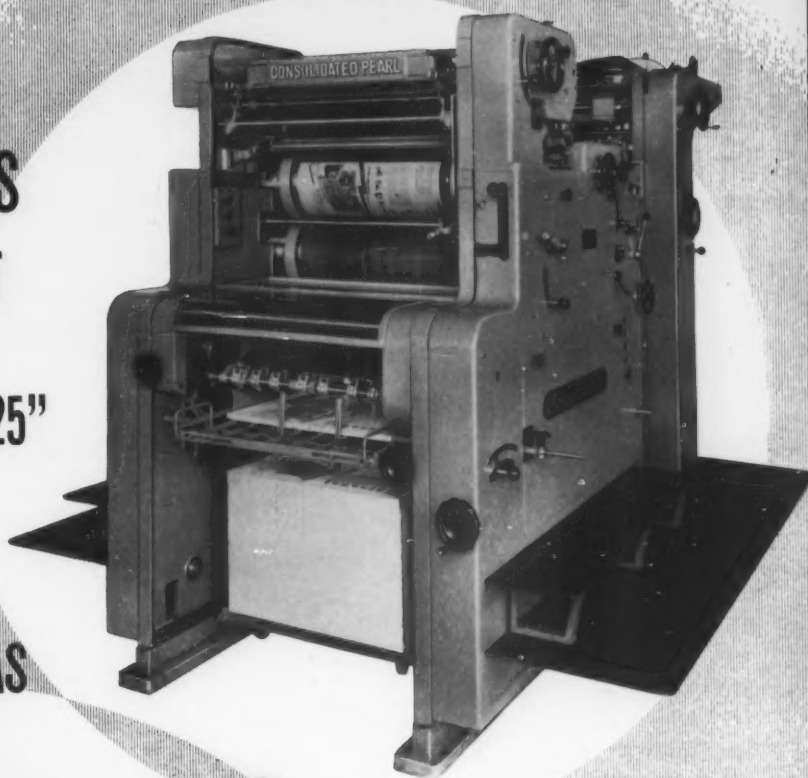
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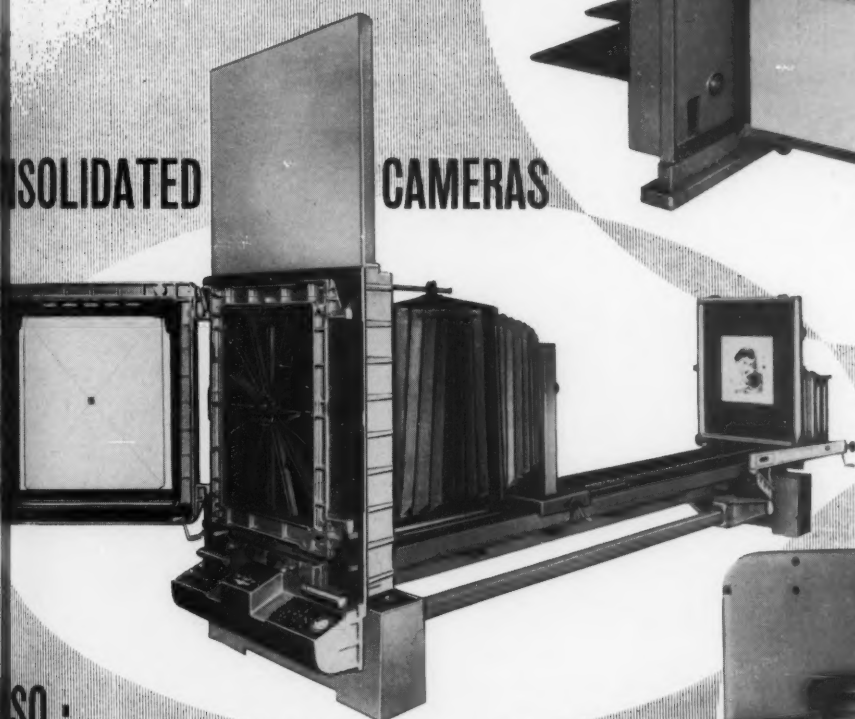
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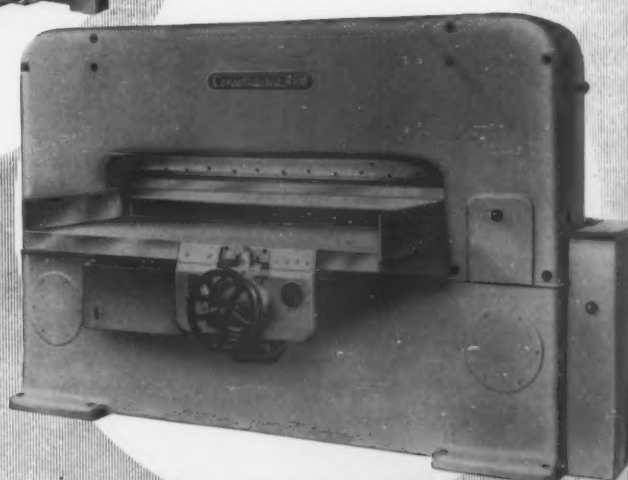


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PHOTOGRAPHIC CLINIC

By Herbert P. Paschel
Graphic Arts Consultant



Air Conditioning: Which Room First?

Air Conditioning

Q: We are considering air-conditioning our litho shop but, in all likelihood, we won't be able to do the whole plant. A heated discussion has arisen between the camera-plate-making group and the pressroom gang about the importance of air conditioning to each department. I'm under the impression that if we can cover only one section at this time, we ought to start with camera-plate-making. Do you agree?

J. L., CHICAGO

A: Air conditioning in a litho plant is basically a means of stabilizing working conditions. It is of equal importance in any and all departments where atmospheric variations influence the materials being handled and seriously affect the quality and quantity of production. Obviously, all departments handling the same materials in sequence must be air-conditioned equally, otherwise an even greater difference in atmospheric conditions is created above and beyond the natural variances.

In making a decision, when only a limited plant area can be air-conditioned, the choice must be based on which department will benefit most. If the department selected is one which receives work from, and transfers work to, other departments, then the other departments must likewise be conditioned.

The pressroom, including paper storage and finishing areas, must be

It is impossible for Mr. Paschel to give personal replies by mail, but all questions will be answered in this column as soon after receipt as possible. The columnist also is available to the trade as a consultant for more complex litho problems.

considered as one unit. The camera, stripping, art (retouching) and plate-making departments must be treated as another distinct unit. The reasoning behind this grouping is as follows.

The films produced in the camera department assume a size in accordance with the prevailing atmosphere. When sent to the stripping and/or art department, a different atmosphere may cause a change resulting in subsequent register problems. Likewise, films and flats acclimated to the stripping room air may change in the plateroom. Hence the need for treating these departments as a complete unit.

The use of glass plates and dimensionally stable base films, plus stripping on glass or plasticized goldenrod may modify the above somewhat. If the use of the dimensionally stable materials eliminates register problems with films and flats, the grouping of several departments is no longer justified. The plateroom remains as the only department of the group which should be air-conditioned.

Under the latter condition the plate and the pressrooms should be air conditioned simultaneously. Most of the variables which cause platemaking and paperhandling troubles can be attributed to temperature and humidity. Since proper compensation for atmospheric variations is difficult, if not impossible, air-conditioning the plateroom and pressroom would increase both the quality and quantity of output of these two departments. If I had to confine my choice to only one department I would select the plateroom. Then, at least, the plates produced would have greater fidelity and durability and be better able to withstand severe conditions in the pressroom. But, as I said earlier, the choice in any given case should be to improve the most troublesome department.

Book Review

FARBENMISCHLEHRE (Principles of Color Mixture). Otto Hummel, 1957. Enlarged and revised by Dr. Wolfgang Fühler. 51 pp., 8 color charts. Polygraph Verlag G.MbH., Frankfurt a/m, Germany.

This German primer on color treats the subject from the standpoint of the graphic arts craftsman. As the foreword points out, the text has been revised and brought up-to-date to provide apprentices with a proper understanding of color.

The physical, psychological and physiological aspects of color and color vision are explained; followed

(Continued on Page 137)

5 keys to 4-color register



Major key...the standard color-separation emulsion...now on film

Continuous-tone color separations from copy with extreme contrast range demand plenty of development latitude and long-scale panchromatic sensitivity.

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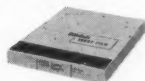
gives you a choice!

This new material, Kodak Color Separation Negative PB Film, is heartily recommended for all 4-color work. An experiment with a box of Separation Negative PB is well worth the time of anyone in pursuit of better and better work.

Your Kodak technical representative will demonstrate—he's there to help.

The other 4 keys in the PB family:

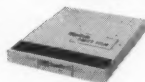
- 2** Kodalith Ortho PB Film, Type 3, .010-inch thick base for line and halftone work.



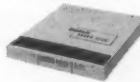
- 4** Kodak Autopositive PB Film for lateral reversals, reflex printing, etc.



- 3** Kodalith Ortho PB Film, Type 3, .005-inch thin base for combinations, reversals of line and halftones.



- 5** Kodak Commercial PB Film for continuous-tone negatives and positives.



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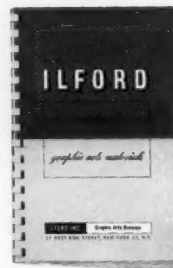
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LITHO CLUB NEWS

Washington

Visits Capital Ink Company

Capital Ink Company was host to 180 members of the Washington Litho Club recently for a tour of the company's newly enlarged quarters. A buffet supper was also provided.

Ralph Cefaly, Cefaly Experimental Co., showed slides of the club's recent, and much publicized, trip to the Glatfelter Paper Mill.

The club's Christmas party was held on Dec. 21, at the Sheraton Park Hotel.

Pictured are the 15 new members of the club, inducted at the November meeting. The other picture shows the newly elected officers of the club (left to right) Fred A. Fowler, U. S. Coast & Geodetic Survey, president, and Albert L. Tucker, Sauls Lithograph Co., vice president.



Publicity Advice Offered

The October issue of "Tips", published by the National Association of Litho Clubs and distributed to all its members included, in addition to general information, a writeup on the Southwest Litho Clinic held in Dallas last June, and advice on improving club publicity by Hamilton C. Carson, editor of MODERN LITHOGRAPHY.

"Tips" urged all local clubs to notify national headquarters of all officer and membership changes. Membership changes should be sent to Fred A. Fowler, 2204 Good Hope Road, S.E., Washington 20, D. C. Changes in officer and board members should be sent, within 30 days of the change, to the executive secretary, Edward L. Bode, 504 Marjorie Ave., Dayton 4, O.

It was reported that Albert Rossotti has been named chairman of an educational committee by the NALC

convention committee to head a program which will take place at the convention in Washington. He was also named custodian of a committee to solicit voluntary contributions from the local clubs toward a NALC contribution to the LTF building fund.

Herman Goebel has been working on a handbook that will be a guide for local clubs. Stephen Rubenstein, president of the Philadelphia club, also is working on the book. "Tips" expresses hopes that it would be ready by the January council meeting.

In the article on publicity, it was stressed that material be sent to the trade journals in time for publication. Mr. Carson assured the readers of "Tips" that the trade magazines are eager to print as much worthwhile information as possible.

He advised local clubs to appoint a specific reporter, and he listed the type of news editors want.

New York

330 Attend Christmas Party

More than 330 members of the New York Litho Club, over 80 percent of the club membership, attended the club's annual Christmas party at the Hotel Biltmore on Dec. 13.

A reception was held in the hotel's Madison room, followed by a full course dinner in the gaily decorated Bowman room. Entertainment at the reception, and during the dinner, was provided by the winsome Vicki Stringer Trio, who were surrounded by "music lovers" at every occasion.

After the dinner club members were presented with gifts and more fun provided by the Chinese Hillbillies. A singer, strongly resembling Marilyn Monroe, also attracted no little attention.

Amid the festivities Daniel Ford, club president, arose among the palms and candles decorating the room and wished all members a Merry Christmas. He also reminded everyone present that the party was not held in conjunction with any other group, and that the turnout was vivid proof of the success of the club's policy of preserving its own identity.

Baltimore

Holds Party, Picks Officers

Wives and friends of the members of the Baltimore Litho Club were invited to attend the Club's annual Christmas party on Dec. 21 at the Lord Baltimore Hotel. Neal Bowden, Graphic Arts Supply Co., was chairman of the party committee.

The club re-elected all of its former officers at the November meeting. They are Thomas Boram, president; Joseph Peroutka, vice president; Maurice Levie, treasurer; and Harold Hackman, secretary. New members elected to the board of governors were Stanley Dabkowski, William Dausen, Melvin Bruchey and Joseph Horac.

Bernard Fader, Aaron Schwartz and Robert Pugatsky, partners in Advanced Lithographing Service, were accepted into the club at the same meeting.

Houston



New officers of the Houston Litho Club: (l.-r.) Jake Ward, president; Frances Porter, secretary; Robert Chester, vice president; and Henry Marchwinski, treasurer.



Newly elected active board members of the Houston Litho Club: (l.-r.) Leslie Kasparik, Robert Chalander, Grady Caldwell, William McGonagle and Otis Muckenfuss. (See Page 111)

Cincinnati

Elects Schannes President

Peter J. Schannes, Mail-Way Advertising Co., was elected president of the Cincinnati Litho Club at an annual dinner meeting on Dec. 10 at Marshall's Restaurant in nearby Kentucky. He succeeds Bernard Smith of the Hennegan Co. Other new officers are Buford Payne, Tri-State Offset Co., vice president; Harold Biddle, Standard Publishing Foundation, secretary; and Russell Esberger, Tru-Color Offset Service Co., treasurer. New members of the board of governors are Anthony Bianchi, A. B. C. Lithographing Co.; Ralph Guenther, Advance Litho Plate Co., and Richard Harvey, Tru-Color Offset Service Co. The new officers are to be installed at a dinner meeting on Jan. 14.

The club's annual dinner dance for

members and their wives was held Jan. 11 at the Hartwell Country Club. Arrangements were made by the entertainment committee headed by Robert C. Groettum, Strobbridge Lithographing Co. Frank G. Hundemer of Perfection Lithographing Co. is a new club member.

Canton

Elects All New Officers

A completely new slate of officers was elected for the coming year by the Canton Litho Club at its November meeting. Succeeding A. L. Cantini as president is J. B. Stanforth, owner of The Home Printing Co. Other officers are Donald Schempp, vice president; Clayton Betz, secretary; and Raymond Princehorn, treasurer. Mr. Stanforth is a charter member of the club and has been on the board of governors.

New President Assumes Duties

At the December meeting of the Canton Litho Club, held at the Lamp Post Lounge, Dec. 11, club members voted unanimously to donate \$100 to the Lithographic Technical Foundation building fund.

The out-going president A. L. Cantini then turned the meeting over to J. B. Stanforth, the new president. In his acceptance speech Mr. Stanforth outlined the function of the club and promised he would try and keep the programs up to the high standards set in the past.

Jack Holsing, past president and charter member of the club, presented Mr. Cantini with a Senefelder bust in appreciation of the work he has done for the club.

Twin City

Installs Officers

The Twin City Litho Club installed its new officers Dec. 5, at the Criterion Cafe in St. Paul. The officers for the coming year are Marvin Hoenze, Photomatic, president; Leonard Holzinger, Photomatic, vice president; Kip Goebel, Brown & Bigelow, secretary; and Frederick Schultz, treasurer.

Outgoing president Herbert Werner, H. M. Smyther Co., was honored for his work as president by being presented with a piece of luggage and a senefelder bust.

Philadelphia



(Top Photo) Recently elected officers of the Philadelphia Litho Club for 1958 are (l.-r.) Andrew Given, treasurer; Stephen Rubenstein, president; and Joseph H. Winterburg, Secretary. (Bottom Photo) Members of the board of governors for this year are (l.-r.) Robert Fournier, Charles Honald, Milton Kochersperger and William Taylor. No meeting is scheduled for January. On Feb. 24 the annual quiz night will be held.

Tulsa

Selects 1958 Officers

Recently elected officers of the Tulsa Litho Club are Dugal McIntyre, president; George Marrs, vice president; and Madeleine Hare, secretary-treasurer. Board members are Herman Coe, Gale Foreman, Frank Le Page, James Anthamaten, Victor Houser and H. F. McGenley.

The club held its annual Christmas party on Dec. 12 at Michaelis's Cafeteria. Bingo and prizes were included in the entertainment.

Milwaukee

Holds Annual Party

The Milwaukee Litho Club held its annual Christmas party at the John Ernst Cafe, on Dec. 17.

New members of the club are Eugene M. McGrath, Standard Paper Co.; Raymond F. Beckhardt, Mueller Color Plate Co.; Raymond Katke, E. F. Schmidt Co.; and Leonard Sommerfeld, Trayton Davis Co.

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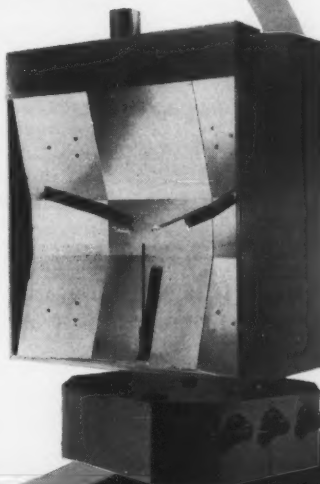
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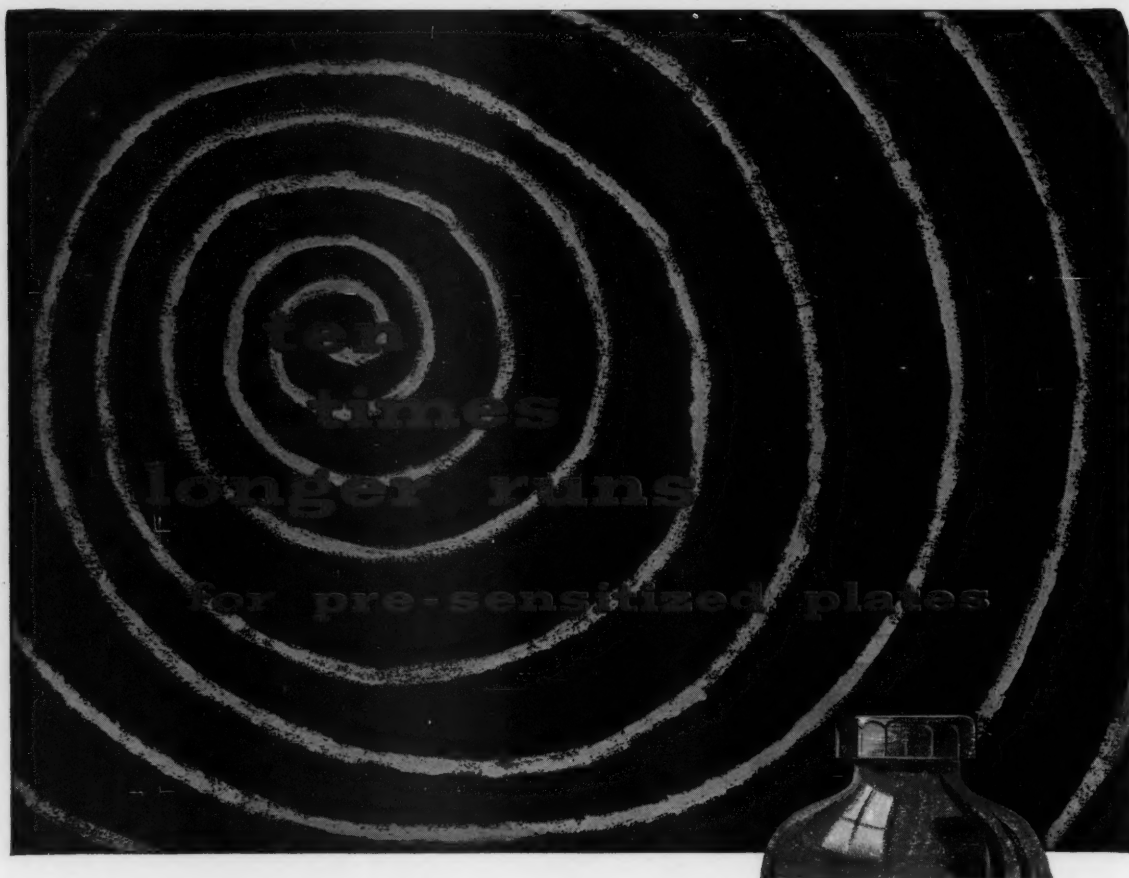
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Boston

Holds Offset Clinic

The Boston Litho Club held an off-set clinic and dinner meeting at the Bradford Hotel, Dec. 2. Four separate "round tables" were set up, each presided over by a "professor of offset" who answered questions on production problems.

Willis Woodward, Providence Lithograph Co., presided over the press room table, W. James Arnold, Advertisers Engravers, over the camera, stripping and copy preparation table, Leonard Squin, Courier Citizen, Lowell, Mass., over the plate room table, and Morris Greenbaum, Graphic Arts Finishers, Inc., over the cutting, binding, folding and better finishing methods table.

James Fraggos, club president, announced that the Lithographic Technical Foundation Shop Practice Forum, is scheduled Jan. 17 and 18, during Printing Week, at the John Hancock building. Registrations made before Jan. 1, were \$9, and those after that date, \$12.

New members elected to the club are George W. Luppold, American Mail Advertising, Inc.; James Hodge, Fine Impressions, Inc.; Joseph E. Bachmann, Bradford & Bigelow; John J. McCarthy, Forbes Lithograph Mfg. Co.; John B. Newson, American Type Founders Co., Inc.; John J. Allgaier and Robert D. Fallon, Murfal Printing Co., Inc.; Albert A. De Benedetto, Henry Sawyer Co.; Rennie J. Carfagna, Western Newspaper Union; Arthur M. Tobey, Cuneo Press of New England, Inc. and Arthur Olney, Harris-Seybold Co.

Cleveland

Hoehn Elected President

Newly elected officers of the Cleveland Litho Club are John Hoehn, American Color Process Co., president; William Sweigard, Colorcraft Corp., 2nd vice president; Kenneth Aldridge, treasurer; and Alvin Martin, R. E. May, Inc., secretary. The incoming board of governors is Stanley Page, Merrick Lithograph Co.;

Raymond Gallagher, A. S. Gilman Co.; and Henry Swain, Copifyer Lithograph Corp.

On Dec. 7, in conjunction with the Cleveland Club of Printing House Craftsmen, the annual Christmas party and dinner dance was held at the Mid-Day Club. Door prizes and souvenirs were given out, and dance music was supplied by Jack Pollack's orchestra. There were more than 430 members and guests present.

The entertainment committees were headed by Anthony J. Lanza, Litho Club, and Richard Dawley for the Craftsmen.

Sol D'Alessandro, Horn & Norris, will represent the club at the mid-season conference of Litho Clubs in Detroit, Jan. 25. Andrew Balika, Copifyer Lithograph Corp. will also attend. Both are past presidents.

George Wise, a partner in the Dugan-Millis Co., and a past president of the Litho Club, was presented with a citation for his untiring efforts on behalf of good craftsmanship, by the club of Printing House Craftsmen. The presentation was made at the Christmas party. Mr. Wise is immediate past president of the International Association of Printing House Craftsmen and a past president of the Pittsburgh Club of Printing House Craftsmen.

Detroit

Installs 1958 Officers

Seventy members of the Detroit Litho Club met at Carl's Chop House on Dec. 13 to install officers for 1958.

Wallace Christensen, Mueller Color Plate Co., formerly vice president of the club was installed as president. Other officers are James Glenn, Justified Composition Service, vice president; Henry Raspecki, treasurer; and Erhard Toensfeldt, secretary.

W. O. Morgan was the speaker for the evening and conducted the installation proceedings.

The club voted to donate \$150 to the Lithographic Technical Foundation's building fund.

Gavels were presented to last year's president Gene Croteau and the outgoing president Joseph Fortin.

Litho Club Guide

ATLANTA

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John Murphy, Secy.
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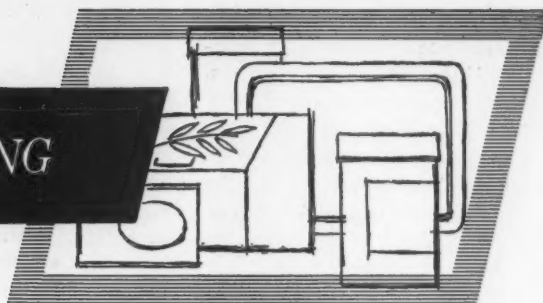
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Ideal Roller & Manufacturing Co., Inc.

EXPERIMENTS with various backing materials for such a blanket (using cut-outs for spot-coating) proved that a very rigid metal backing is preferred in order to eliminate continual stretching. An excellent metal for this purpose is ordinary black iron. It can be obtained in almost any desired thickness. Black iron sheets as thin as .017 inches are strong enough to give runs of several million impressions without fatiguing.

The use of soft black iron backing sheets permits bonding of any of the synthetic rubbers, the same as with the conventional metal cores. In manufacturing metal-backed blankets the metal backing sheet first is curved to form a cylinder. This cylinder then is mounted on a mandrel exactly the same diameter as the mandrel on which the blanket is to run. This practice permits vulcanizing the rubber to the metal base on exactly the same radius of curvature as the original roller. Vulcanized in this manner the rubber is not placed under tension when the blanket is mounted in the coating machine. If the rubber were vulcanized to a flat backing sheet, and then wrapped around the mandrel to form a cylinder, it would then be under stretch, consequently more subject to damage or cutting by

the sharp edges of the metal sheets to be coated. This is particularly true when thick layers of rubber are required to give a soft cushion and also permit sectioning for spot coating.

Since the majority of coating rollers today fail because of abrasive wear or cutting, the surface rubber should be vulcanized in a manner so as to give the least possible stretch. Unstretched rubber will resist cutting better than rubber under stretch.

Blanket Mounting

In order to adapt a blanket-type covering to a coating roll, a suitable means must be provided for mounting the blanket taut around a mandrel. This necessitates a gap in the circumference of the resulting roller.

The gap is for ratchet bars or other suitable locking mechanisms which will draw the leading and trailing edges of the blanket together, in order to hold the blanket snugly to the mandrel.

Blanket coverings are not practical on some of the older coaters, which are not timed, nor can the blanket-type coating roller be adapted to coating machines which will not accommodate a roller having a circumfer-

ence at least five inches greater than the maximum coating length.

For example, if 33 inches of coating length is required, a 12½-inch diameter roller would be required. This would allow about five inches of the circumference for gripping ends of metal-backed blanket and necessary tension mechanism.

Blanket-type sleeves have been manufactured for large coating rollers — on the order of 15½ inches in diameter. Such a roller, having a circumference of more than 48 inches, permits plenty of space for the necessary locking and tension device. For example, if 37 inches of coating length is required, a 15½-inch diameter roller will still allow about 11 inches of the circumference on which to install tension lockup mechanism.

Several metal-backed blankets for coating rollers of 15½-inch diameter have been made. For mounting these blankets, the leading and trailing edges of the metal were provided with screw holes to facilitate fastening the blanket to tension bars. In the space between these two bars turnbuckles were provided for drawing the ends of the blanket together.

While it is possible to install the blanket on the operating mandrel without removing the mandrel from

the coating machine, this practice may not always be practical. For example, if the blanket is to have cut-outs, it may first be mounted snugly around a duplicate operating mandrel, since it is more convenient to make accurate cut-outs if the roller is out of the coating machine. It can then be returned to the operating mandrel and registered.

In the case of short runs, where special cut-outs are required, the blanket-type roller works out well since it can be removed from the mandrel on which it runs, and stored away for future runs. It is best to store curved metal-backed blankets in a vertical position in the original shipping cartons when not in use.

The gap or open area between the leading and trailing edges of a blanket presents somewhat of a problem in that the cylinder is not supported at this point as it passes over the impression roll. The result is that the roller bumps during every revolution, which puts excessive strain on the whole coater, particularly the gears.

To eliminate this continual bumping during each revolution, end bearers must be provided. The bearers consist of rubberized metal rings which are screwed to the end of the blanket mandrel, and are ground to the same diameter as the coating roller. Since these rubber covered bearers may contact the coating lacquer, they should be made of the same solvent-resistant rubber as the blanket covering. It is also important, in order to avoid bumping or chatter, to use the same durometer rubber on the bearers as on the blanket.

Blankets made to date have been applied to a 44-inch long mandrel. This permitted end bearer rings three inches wide where a 36-inch blanket is used to coat 36-inch metal.

While this sounds like a money-saving idea for the metal coater, nevertheless, as mentioned before, blanket-type sleeves cannot be adapted to all coating machines now in use. So before you get too excited about the possible savings, make sure first that your coater will accommodate a roller whose circumference is at least five inches greater in length than the maximum coating length you

require. If your coater now has an oversize roller, there is a possibility that it could be provided with a mandrel suitable for mounting a sleeve-type surface. If, however, your coating machine does not have an oversize roller, it probably would be far too costly to rebuild it to use a sleeve-type roller. The special cylinder required to mount blanket-type coating rollers is a rather expensive item in itself.

Paper Dampeners

Another development for the metal decorator in which synthetic rubber has played an important part is the use of paper covers for soft-base

For the first portion of Mr. Hubbard's comments on the development of synthetics, see the December MI, page 75.

dampener form rollers. This thin inexpensive paper replaces the molleton or fabric covered dampener rollers.

Since these thin paper covers have to be wrapped or spiralled around the base dampener roller, overlapping of the paper is necessary. Where the paper overlaps, the diameter of the roller is increased by the thickness of one layer of paper.

Normally, this diameter difference or ridge on the surface of the water forms would show up on the printed sheet. If a soft, low modulus synthetic rubber base is used, it eliminates any tendency for such a surface to cause streaks, or otherwise to show up in the printing.

The most suitable paper found so far for this purpose is vegetable parchment. The surface of this paper is absolutely void of any loose or random fibers. Loose or broken fibers are probably the greatest cause of hickies. Such a non-fibrous or amalooidal type surface has absolutely no affinity for oil inks and will not mechanically occlude ink as do woven fibers such as molleton. Washing of dampener covers is eliminated. In some plants the paper covers are replaced each day — others operate them for as long as two weeks before changing.

Aside from the fact that the paper covers cost practically nothing and

require no washing, they afford many other very worthwhile savings. Since the surface has no affinity for ink it will not scum, therefore it is possible to change from dark colored inks to light, without changing dampeners. This same lack of affinity for ink prevents transfer of ink to the ductor roll surface, thereby prolonging its useful life. A very important feature found with paper covered dampeners is that the transfer of water from the fountain to the plate is immediate and much more sensitive than when thicker dampener covers are used. This amounts to quite a saving in that fewer sheets are required to get the job started.

Soft Rollers Used

The use of these thin oil-proof paper covers permits the use of very soft synthetic rubber rollers which can be set with less pressure and still give proper dampening. Synthetic bases now being used with paper covers should last almost indefinitely; — certainly much longer than even harder rollers when molleton or cloth covers are used, since the usual detergent and solvent washing and scrubbing are no longer necessary.

We can hardly consider synthetic rubber inking rollers a new development. They have, with few exceptions, replaced leather, crude rubber and vulcanized oil on all tin offset presses. The replacement of these materials with synthetic rubber has resulted in a very worthwhile saving to metal decorators.

Leather for example, while an excellent ink carrying material, required frequent and time consuming hand scarping to remove dried ink. Also, because of its hardness and abrasive action, it caused excessive plate wear.

While crude rubber never became very popular for use in offset inking rollers, the few that were used were a continual source of trouble to pressmen because of the very poor ink and solvent resistance.

Vulcanized oil rollers, in spite of their excellent ink carrying properties and resistance to washup solvents, were not very practical for the metal decorator, primarily because of their

low tensile strength and abrasive resistance.

Importance of Synthetics

Today there is hardly a tin press that operates with anything but synthetic rubber inking rollers, from the fountain to the plate. Synthetics have overcome all of the major faults of the older materials. They can be made in almost any durometer, and they have excellent resistance to the swelling action of all inks and washup solvents.

Likewise coating or varnishing rollers made of synthetic rubber are currently becoming increasingly important. There are few coatings in use today that cannot be applied more economically with synthetic rubber than with glue composition. In most cases synthetic rubber will show greater dimensional stability than glue composition. The change-over from glue composition to synthetic rubber has taken place within the past few years. If improvements in raw polymers and compounding techniques advance at the same rate as they have in the past 10 years, synthetic rubber soon will predominate on coating machines.★

Elected Caspers Board Chairman

Bertram W. Bennett, president of Caspers Tin Plate Co., has been elected chairman of the board and Earl E. Gray, formerly executive vice president, has been elected president. The position of board chairman has been vacant since 1947.

Mr. Bennett has been associated with Caspers for 35 years, having served as president since 1938 and as a director since 1936.

Mr. Gray joined the company in 1929, was elected vice president in 1938 and executive vice president in 1954. He is a former president of the National Metal Decorators Association and at present one of its directors. He is also a director of the Lithographic Technical Foundation.

Caspers Tin Plate Co. operates five subsidiary companies involved in metal fabricating, can manufacturing and the sale of steel and aluminum.



Bertram Bennett



Earl Gray



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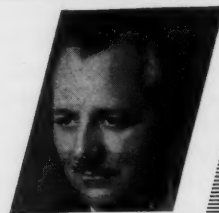
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PRODUCTION CLINIC

By Theodore Makarius



Paper Curl and Misregister

A reader asks about paper curl and ways of treating it in the pressroom. The best advice I can give is taken from chapter 21 of my book Operation of the Offset Press:

PAPER wrinkling, a common cause of press delay, can be greatly reduced by observing the following procedure. When paper is received in either cases or skids, it is most generally so well packed and protected that under normal circumstances, it will not be affected by changes in temperature and humidity. The trouble usually starts when the wrapping is removed too soon before the paper is to be used and the cases or skids stand exposed.

A recommended method is to open one skid or case, take out enough sheets for makeready, and then carefully replace the wrapper until the job is actually running on the press.

The sheets used for makeready will indicate what may be expected from the paper. If the moisture content of the paper is not in balance with the atmosphere of the pressroom, the sheet will undergo physical dimensional changes, possibly causing wrinkles, or misregister, when printing pressure is applied.

When the moisture content of the paper is less than that of the pressroom, the sheets will wave or curl along the edges. When such is the case, it may be found helpful to have several electric heaters placed around the stack in the feeder. By regulating the distance from the sides of the pile

to the heaters, the right amount of heat may be applied to prevent the exposed edges of the paper from absorbing excess moisture, and thus keep the sheets flat.

After the sheets have been run through the press, they should be covered with either waste sheets or the original wrapping until the succeeding colors are to be printed.

Applying Heat

If the paper in the stack has a greater moisture content than the air in the pressroom, the sheets will bulge in the center. In this case, heat should be applied either over the center of the stack in the feeder, or above or below the feeder tapes if possible, so that the heat can reach the center of each sheet as it feeds into the press. On the other hand, if the edges of the paper have absorbed more moisture than the center, heat should be directed to the edges and not over the center of the stack. When applying heat to the edges of the paper, it is wise to use the blower nozzles, which are regular equipment on the feeder, to separate the sheets slightly so heat may be absorbed several inches in from the edge.

At no time should the amount of heat be excessive or the sheets may curl in the opposite direction. With practice, one should be able to judge the right degree of heat and have it conform with the speed of the press so that the top lift of sheets lies flat as the paper feeds into the press.

When the press is stopped, the heat should be turned off.

Strip heaters without polished reflectors are best suited for this purpose. Reflector heaters are not as effective, as they have a tendency to concentrate or confine the heat to too small an area.

If heat is not applied carefully, it may prove damaging. It must be remembered that it should be used only when required and to the extent needed.

Distortion of Paper

It is generally understood that paper, when passing between cylinders under pressure will fan out or stretch in width. This condition can be aggravated if pressmen overlook the fundamental principle of guides or stops on the press. If a sheet that has fanned out can be brought back into register by moving the stops, the same principle can cause a sheet to be thrown out of register if the stops do not conform to the contour of the gripper edge of the sheet. In other words, if the paper is cut and squared properly, all the stops on the press should be set against the cylinder edge. In years gone by extra trimming of paper was general practice for good register, but there is very little of it done today.

As an alternative to squaring the paper, it is necessary to lay sheets of the stock against a straight edge to determine whether the side to be used

(Continued on Page 135)



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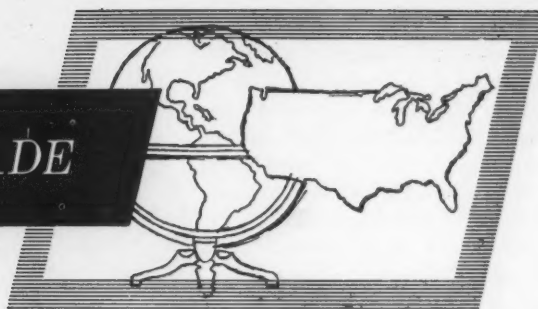


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NEWS about the TRADE



LTF Building Fund Nears Goal

More than \$63,000 has been received by the Lithographic Technical Foundation towards its goal of \$80,000 needed for the purchase of Glesner House in Chicago. With several more pledges already in, there is little doubt that the goal will not be achieved.

The actual purchase price of the laboratory building is \$70,000, with the additional \$10,000 needed to cover legal and incidental expenses.

LTF reports that it is redoubling its efforts in order to make the drive a success well in advance of the April 1 deadline. Already more than 60 companies, individuals and groups have responded to the appeal.

Plans are being made to recognize all contributors. A plaque on which their names will appear will be placed in some suitable location in the building.

Lithographers Hear Joseph Leigh

The Young Lithographers met on Jan. 8 at the Advertising Club in New York to hear Joseph Leigh, chairman of the board of directors, Einson-Freeman Co., Inc., speak on "Ideas in Action."

Mr. Leigh presented his ideas on how to become a good or better salesmen, particularly in lithography, and answered questions on the subject.

He emphasized the point that understanding a product and a product's merchandising problem will help one to become a successful salesman of lithography.

R & E Council Honors Donnelley

Honorary membership, the highest honor of the Research and Engineering Council of the Graphic Arts Industry, was awarded to Elliot Don-

nelley, R. R. Donnelley & Sons, at the Council's executive meeting in Chicago Dec. 12.

Mr. Donnelley received the award for his work as the Council's vice president. Edward J. Triebe, Kingsport Press, and president of the Council during Mr. Donnelley's tenure, presented the framed certificate.

Others who have received the award are William Baumrucker, Jr., Wade Griswold, Morris Kantrowitz, J. S. Mertle, Joseph Schwartz and J. Homer Winkler.

NALC To Meet Jan. 25

The National Association of Litho Clubs will hold its Mid-Year Council meeting Jan. 25, simultaneously in three cities.

Eastern area representatives will meet in New York City at the Biltmore Hotel; Mid-West delegates at the Statler Hotel, Detroit; and Southwest council members at the Adolphus Hotel, Dallas.

The tri-meeting arrangement has been set up to save delegates traveling time and to save local clubs traveling expenses.

A conference telephone hook-up has been set up between the three meetings. A three-way call will be placed between 2 and 3 p. m. EST.

J. Leonard Starkey, national president, will moderate the over-all three-city meeting.

Large Press For Schmidt

Schmidt Lithograph Co., San Francisco, has purchased a Harris 55 x 77" four-color offset press. The press has a rated capacity of 6,000 impressions per hour the company reports, and it will be used mainly for labels, cartons, and point-of-sale advertising material.

Weil's Co. Elects New Officers

Sig Stern, president of David Weil's Sons Lithographic Co., Brooklyn, for the past 23 years, was elected chairman of the board on Dec. 27.

Other elected officers of the 93-year old firm are Herbert Sachs Hirsch, formerly secretary for the past 23 years, president; Arthur Staib, Jr., vice president; Herbert S. Hirsch, Jr., secretary; and Arthur Staib, treasurer.

The company was founded in 1865 by David Weil. Upon his death in 1889, his sons Henry and Morris continued the business, forming a corporation in 1894. Included among the corporation's officers were Morris Hirsch, father of the present president, and Charles Staib, father of the present treasurer.

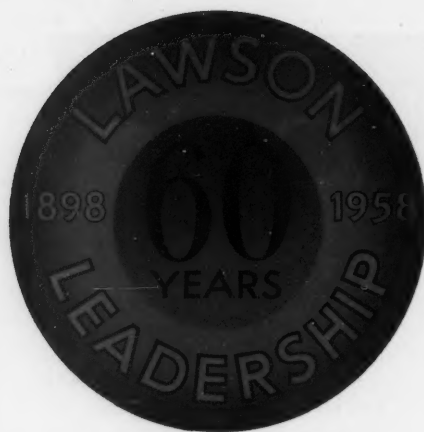
A combination litho and letterpress shop, the firm specializes in packaging and advertising materials.

Donnelley To Enlarge Plant

R. R. Donnelley & Sons Co. has announced plans to enlarge its Willard, O. plant by constructing facilities for press and bindery departments.

The new space will add approximately 87,000 sq. ft. to the present 60,000 sq. ft. and will be devoted largely to the production of case-bound books. Construction is expected to be completed next year.

The announcement follows the company's report (MODERN LITHOGRAPHY, December) of an agreement to purchase about 140 acres of land near Warsaw, Ind., for the possible future construction of a printing plant. Both projects are part of the company's over-all expansion program, which has also included recent additions to the rotogravure facilities of its Chicago plant.



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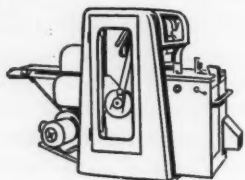
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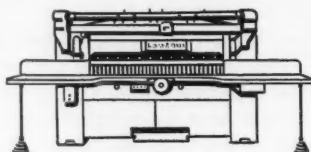
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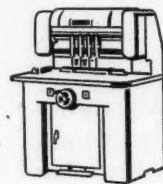
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NYEPA Panel Discuss Plate Problems



Panelists at the meeting of the lithographic division of the New York Employing Printers Association held at the Hotel New Yorker in November. The panelists, looking over part of a presensitized plate exhibition are (l.-r.) Edward Blank, David O. Johnson, Albert Materazzi and Charles W. Latham.

A four-point program for improved handling of litho plates to reduce pressroom troubles, and a list of "ten best ways to ruin a good plate on the press," were outlined for 125 members of the Lithographic Division, NYEPA, during a meeting in November at the Hotel New Yorker.

Panelists were Albert Materazzi, Litho Chemical & Supply Co., David O. Johnson, Princeton Polychrome Press, and Charles W. Latham, NYEPA lithographic consultant. Moderator was Edward Blank, Publishers Printing-Rogers Kellogg Corp., chairman of the division.

Mr. Materazzi's four-point program for greater success with plates included (1) adequate flats made of quality goldenrod to hold back light in non-printing areas, (2) qualified personnel, (3) adequate plant space for platemaking, (4) careful testing of plates to check desensitization.

In testing desensitization, Mr. Materazzi recommended that the pressman roll the plate up solid and see if it will clean up properly. A well made plate should withstand several such tests. He recommended that the same test be made at the end of the day's run just before quitting time. If the

plate is to be washed out and filed, use of a powder composed of 50 percent rosin and 50 percent talc was recommended.

Mr. Latham's "ten best ways to ruin a good plate on the press" were as follows: (1) too much ink, (2) too much water, (3) too much acid in water, (4) too much gum in water, (5) too much roller pressure, (6) too much blanket pressure, (7) dampeners set too heavy, (8) too much stopping of press and letting plate dry up, (9) not enough ink on image areas, (10) too thick a gum on plate when gumming up.

The NYEPA consultant said that a good plate — one that has been properly etched, post cleaned, and treated with non-blinding lacquer — is the first essential in lithography. "You can't expect your pressman to gum up the plate every time he stops the press," Mr. Latham said. "In too many plants the pressman is not given a good plate to begin with."

Mr. Johnson urged that personnel assigned to the camera department review the basic elements of photography. "Such personnel must know modern techniques in staging, opaqueing, shooting line negatives, and

shooting half-tones," he said. He urged lithographers not to be satisfied with a flat print supplied by the customer. "Get the artist to put in some pure whites or blacks, or manipulate your camera to achieve the same effect," he recommended. "Make sure your customer knows how the print will reproduce on the stock selected."

On the subject of screens, Mr. Johnson said that a study had indicated that a screen finer than 175 does not improve detail.

The characteristics of the Kodak three-color process, especially its advantages for short runs, were then explained by Mr. Johnson. He pointed out that multiple masks are not as important in three-color work, and one man can screen and separate, thereby reducing costs.

Mr. Materazzi, enlarging on the prevention of plate problems, urged that plates be purchased on the basis of specifications determined by length of run, color register and sharpness of detail. "You should know that for close register on a multicolor job, a zinc plate is not a good choice because it stretches. An aluminum plate will give you a sharper image, and a polymetallic plate will give the sharpest possible dot throughout the run," he explained.

Mr. Latham then pointed out the importance of careful layout of the sheet in avoiding register problems. "To get fine register, work near the gripper and side guide where register is apt to be good. Place solids carefully to reduce chance of ghosts and tail hook," he urged. "Solids placed along the back edge of large sheets will intensify any tail hook you may be getting."

Discussing the causes of scumming, Mr. Materazzi said that dirty dampeners were frequently responsible. He pointed out, however, that lithographers should expect dampeners to get dirty and should be prepared for it, since dampeners are the best things to get emulsified ink off the plate.

When blinding occurs because gum is adhering to the lacquer, Mr. Materazzi suggested that the ink rollers be lifted and some sheets be run

through to try to work off the gum.

After the prepared remarks, Mr. Blank presided over an active question-and-answer session on such problems as soft dots, dark reaction, doubles and slurs. As is customary at Litho Division meetings, troublesome press sheets were submitted to the panel for analysis.

Navigators Sponsor Forum

The Navigators are sponsoring a forum on March. 15 at the Hotel Biltmore, New York, called Navigraphic '58.

Navigraphic '58 will consist of a panel of specialists in the graphic arts field who will discuss the newest advances in the industry. They will attempt to present the story behind these advances and answer questions on their application.

The program will be directed towards the plant owner and his production personnel. The Navigators believe that it will be the first annual progress report the industry will have.

The program is still in the planning stages but several speakers have already been lined up. Charles V. Morris, Reinhold-Gould, Inc., will deliver the keynote address, "Importance of Keeping Posted on Progress in the Graphic Arts." Other speakers already scheduled are Joseph Weiler, Marchbanks Press and Michael A. Canale, Canale Chemical Co.

The cost for the all-day forum will be \$12.50 per person, including the cost of morning refreshments and luncheon.

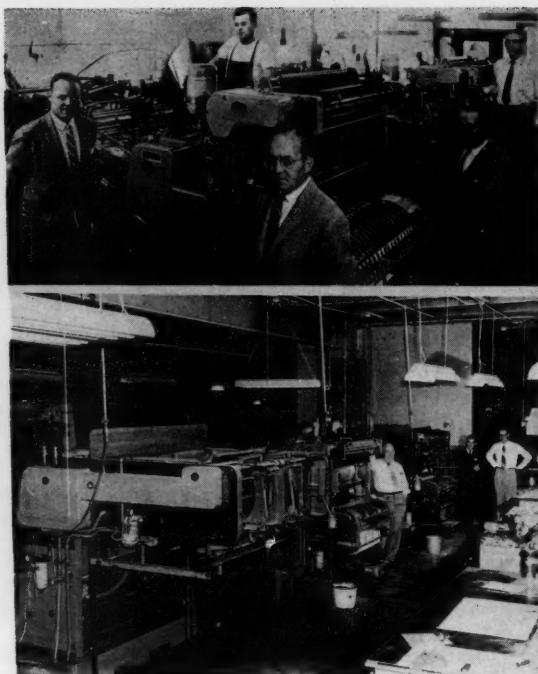
Appointed To Sales Post

Walter P. Turski has been appointed to the sales staff of Graphic Arts Engraving Co., Minneapolis, and Quality Park Engraving Co., St. Paul. He was formerly production manager of Ruthrauff and Ryan, advertising agency.

Art Group To Hold Exhibit

The Art Directors Club of Chicago has announced plans for the 26th National Competition and exhibit of outdoor advertising art to be held in Chicago "sometime in the spring." Entries will be open for printed

(top photo) The Miehle 29 Offset, serial number 1000, installed in the Denver plant of John Frederic Printing Co. Pictured are Messrs. Robert and Homer Frederic and Thomas Griffin, partners in the company. Also in Denver is the Miehle 29 Offset, serial number 1, in the plant of the Poertner Lithographing Co. (bottom photo). Viewing it are Messrs. Henry and Alan Poertner and Mack Thompson, Miehle's Denver representative.



posters in 14 product classifications and for painted bulletins in two groups. No closing date for entries was specified but judges were to begin selection of the prize winners on Jan. 28. In addition to certificates of merit for outstanding designs, there will be a grand award, a silver medal and a bronze medal award for the three top winners.

Cincinnati GAA Picks Officers

W. Wayne Hogan, superintendent, Methodist Publishing House, is the new president of the Graphic Arts Association of Cincinnati, succeeding Wilbert Rosenthal, S. Rosenthal & Co. Other officers elected by directors are Robert C. Krehbiel, C. J. Krehbiel Co., vice president and William A. Kleesattel, Feicke Printing Co., treasurer. John D. Rockaway was re-appointed managing director.

Directors elected for three-year terms at the annual Association dinner meeting on Dec. 4 are Frank Kreger, Rookwood Press, and Messrs Hogan, Krehbiel and Kleesattel. Reuben H. Bohnett, Bohnett Co., was elected honorary life member of the board of directors in recognition of his many years of service to the Association.

LNA Contest Judges Selected

The Lithographers National Association Awards & Exhibit committee has selected 36 experts in lithography, advertising, production and commercial design to judge the 8th annual Lithographic Awards and Exhibit.

Judging of the entries from the U. S. and Canada, will take place in New York during the week of Jan. 27. Deadline for entries is Jan. 20, and they should be sent to LNA Awards Competition, c/o George V. McLaughlin, New York Trade School, 312 E. 67th St., N. Y.

The judges, who have been divided into six teams, will score specimens in 48 classifications on the basis of their lithographic quality, art and design and functional value.

The categories for the teams are point-of-purchase material; direct mail, annual reports, magazines & house organs; books, book jackets, maps, menus, programs, etc.; posters, cards, decals, metal lithography; packaging, specialties & novelties, bank & commercial stationery; calendars, art prints, greeting & pictorial cards.

Winners will be announced in a catalog to be distributed at the LNA convention, Phoenix, Ariz., on April 27.

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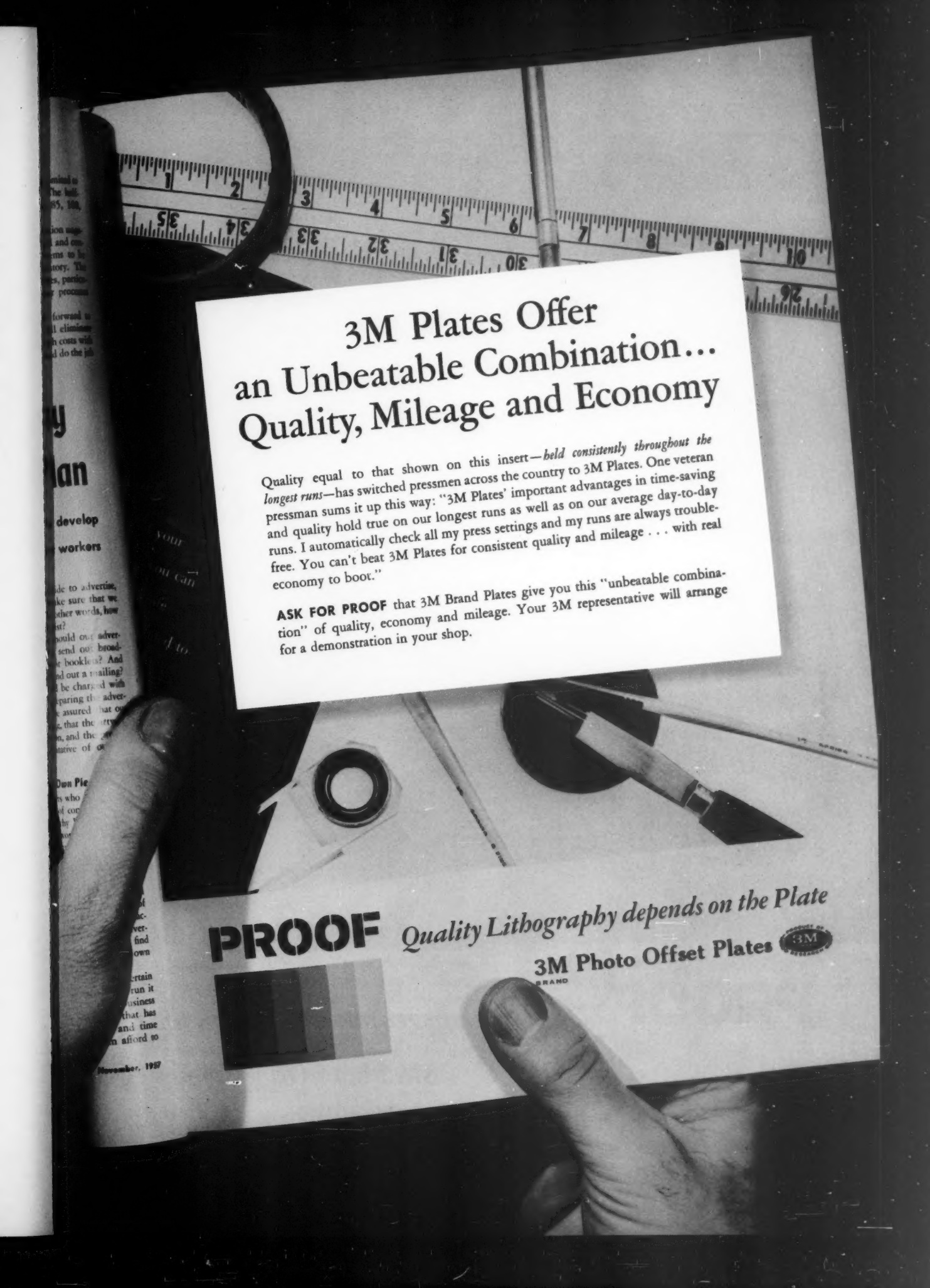
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ILLINOIS	CHICAGO CHICAGO CHICAGO CHICAGO CHICAGO	Atwood Paper Co. Empire Paper Co. Hobart Paper Co. McIntosh Paper Co. Parker, Schmidt & Tucker Paper Co. James White Paper Co. C. J. Duffey Paper Co.	RHODE ISLAND	PROVIDENCE	Narragansett Paper Co.
INDIANA	FT. WAYNE INDIANAPOLIS INDIANAPOLIS INDIANAPOLIS	The Millcraft Paper Co. The Chatfield Paper Corp. Indiana Paper Co. C. P. Lesh Paper Co.	SOUTH CAROLINA	COLUMBIA	Epes-Fitzgerald Paper Co.
IOWA	DES MOINES DES MOINES	Birmingham & Prosser Co. Western Newspaper Union	TENNESSEE	MEMPHIS NASHVILLE NASHVILLE	Louisville Paper & Mfg. Co., Inc. Bond-Sanders Paper Co. Dillard Paper Co.
KANSAS	WICHITA WICHITA	Southwest Paper Co. Wertgame Paper Co.	TEXAS	FORT WORTH HOUSTON LUBBOCK SAN ANTONIO	Western Paper Co. Benson Paper Co. Western Paper Co. Natho Paper Co.
KENTUCKY	LOUISVILLE LOUISVILLE	The Rowland Paper Co. Southeastern Paper Co.	UTAH	SALT LAKE CITY	Dixon & Co.
LOUISIANA	NEW ORLEANS	Alco Paper Co.	VIRGINIA	NORFOLK RICHMOND	Epes-Fitzgerald Paper Co. Virginia Paper Co., Inc.
MAINE	PORTLAND	C. M. Rice Paper Co.	WASHINGTON	SEATTLE	Paper Sales Corp.
MARYLAND	BALTIMORE BALTIMORE BALTIMORE	Bradley-Reese Co., Inc. The Mudge Paper Co. O. F. H. Warner & Co., Inc.	WASHINGTON, D. C.		Barton, Duer & Koch Paper Co. Stanford Paper Co. Virginia Paper Co.
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MICHIGAN	DETROIT DETROIT GRAND RAPIDS LANSING	Chope-Stevens Paper Co. The Union Paper & Twine Co. Grand Rapids Paper Co. The Dudley Paper Co.	EXPORT ONLY		
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MISSISSIPPI	JACKSON	Townsend Paper Co.			
MISSOURI	KANSAS CITY SPRINGFIELD ST. LOUIS ST. LOUIS ST. LOUIS	Wertgame Paper Co. Wertgame Paper Co. Beacon Paper Co. Birmingham & Prosser Co. Tobey Fine Papers, Inc.			
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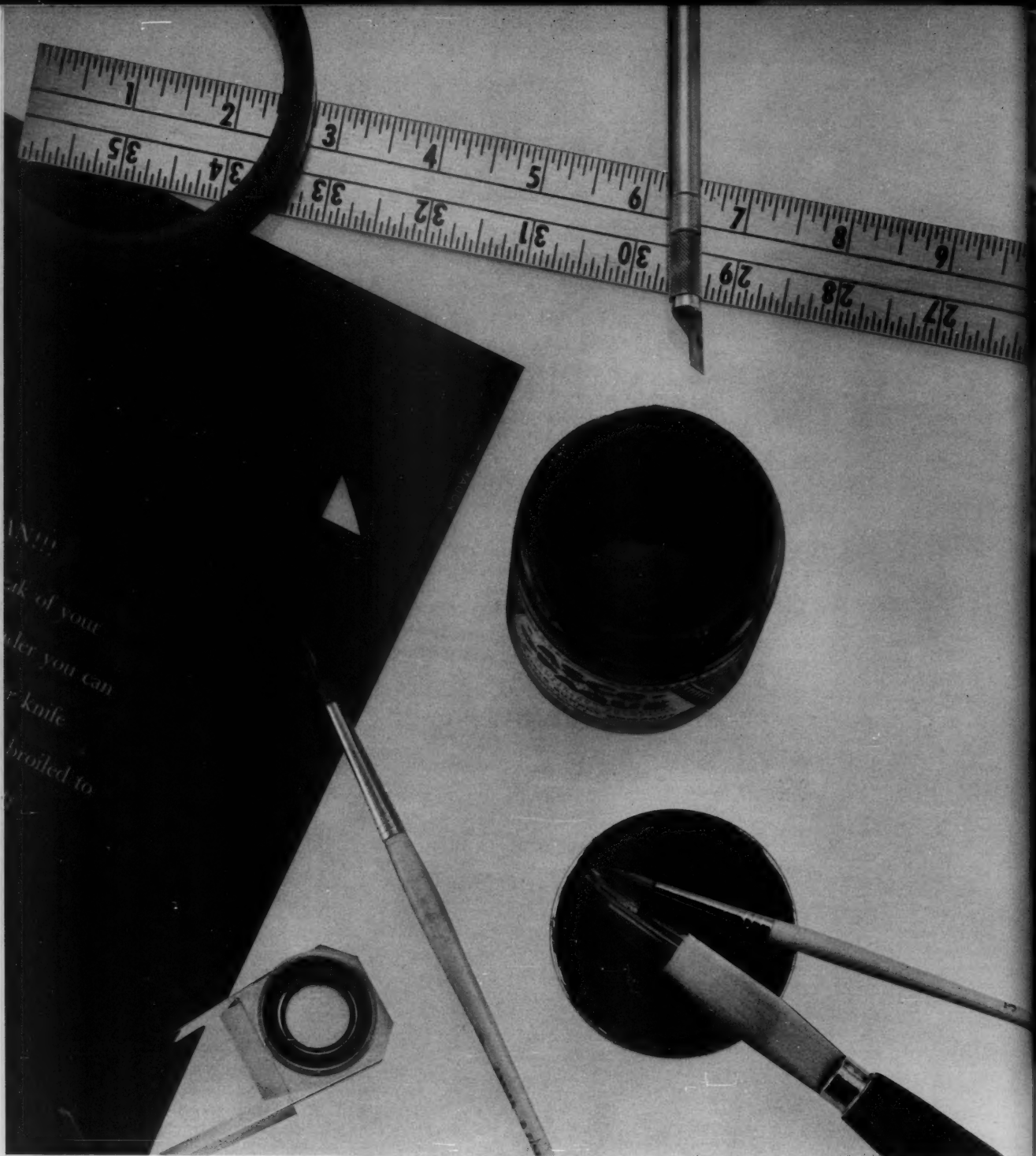
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Quality Lithography depends on the Plate

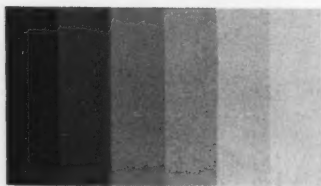
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November, 1967



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Quality Lithography depends on the Plate

3M Photo Offset Plates
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PRINTING PAPERS FOR BOOKS, MAGAZINES, COMMERCIAL PRINTING, BUSINESS FORMS AND PACKAGING

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OXFORD



Fenwick Opaque Offset

OXFORD PAPER COMPANY
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FENWICK OPAQUE OFFSET is a new Oxford Paper expressly made to meet today's more exacting requirements for full-color offset reproduction. It is a premium quality paper, noticeably higher in brightness and opacity than standard offset papers. It also embodies other qualities including dimensional stability, uniform ink receptivity and high bond, that are necessary to insure optimum printing results and economical performance on modern high-speed, precision offset presses. Available in either smooth or vellum finish.

WESCAR OFFSET and **RANGELEY OFFSET** (companion grades manufactured at the West Carrollton and Rumford Mills, respectively) are bright, white papers of high opacity, exceptional strength and ink receptivity. They have excellent bond and are free from lint and fuzz. Designed to insure maximum performance at high speeds, they are recommended for fine reproduction of halftones and multicolor process work. Wescar and Rangeley Offsets, white, are available in both smooth and vellum finish. Wescar Offset, vellum finish, is also available in eight distinctive tints — ivory, canary, French gray, tan, green, blue, pink, and golden yellow.

WESCAR SATIN PLATE OFFSET is a film-coated (pigmented) paper of high brightness and opacity with a dull satin finish. Designed for black and white or multicolor offset printing, it gives soft, pleasing results in clear detail through a maximum range of tone gradations.

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	Bulkley, Dunton & Co., Inc.
	Green & Low Paper Co., Inc.
	Kennelly Paper Co., Inc.
	The Whitaker Paper Co.
Oakland, Calif.	Blake, Moffitt & Towne
Omaha, Neb.	Western Paper Co.
Pawtucket, R. I.	Carter Rice Storrs & Bement
Philadelphia, Pa.	Atlantic Paper Co.
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Tucson, Ariz.	Blake, Moffitt & Towne
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Worcester, Mass.	Carter Rice Storrs & Bement
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PRINTING PAPERS FOR BOOKS, MAGAZINES, COMMERCIAL PRINTING, BUSINESS FORMS AND PACKAGING

Two New ATF Vice Presidents

DeWitt G. Manley has been elected vice president in charge of sheet-fed sales for American Type Founders Co., Inc., Elizabeth, N. J. Douglass



Manley



Murray

E. Murray has been elected vice president in charge of web-fed sales.

Mr. Manley joined ATF in 1945 as a field specialist. In 1948 he was promoted to promotion manager, offset press sales, and since then he has also served as branch manager in Detroit. From 1955 until the present he has served as general sales manager, sheet-fed division.

Mr. Murray has been associated with the web offset division for the past 22 years, having served as general sales manager of the web division since 1945. He has been instrumental in designing and building many of the ATF web presses in operation.

31st Design Exhibit in May

The 31st annual exhibition of Design in Chicago Printing will be on display at the Chicago Art Institute from April 11 to May 18. Deadline for entries will be Feb. 5 and judging will start Feb. 15, according to an announcement from the Society of Typographic Arts, sponsor of the exhibit. This year's theme will be "The Printed Word" and the aim will be to demonstrate the part printing plays in everyone's life, as well as to emphasize the importance of well designed printing in improving communications. Announcements of the contest have, for the first time, been mailed to 1500 Chicago area printers in a try at broadening the range of entries and stimulating among printers, especially small firms, an interest in improvement of the design of printed pieces.

Among projects the Society of Typographic Arts is hoping to see much closer to realization this year

is a plan for a permanent headquarters for itself and for Chicago's entire printing industry. Although that city is an important printing center and the home of numerous organizations and schools devoted to the graphic arts, the industry has never had a common meeting place or gallery for its use. This, the STA hopes, can be ultimately corrected by a non-profit foundation for which a committee has been seeking funds for two years.

LNA Moves Hdq. To Washington

The executive offices of the Lithographers National Association have been moved to 1025 Connecticut Ave., N. W., Washington 6, D. C.

Oscar Whitehouse, executive director, will be located at the new address, as will Quentin O. Young, labor relations director, the cost, accounting and financial management committee, the bank stationers' section and the platemakers section.

An eastern branch office has been opened at 597 Fifth Ave., New York, under the direction of Herbert W. Morse, promotion director. The western office address in Chicago remains unchanged.

'3-Color' Out of Print

Because of an unprecedented demand for the reprint booklet "Three-Color Direct Separation," by John M. Lupo, Jr., all 1,500 copies are gone and the booklet now is out of print.

Orders continue to come in for the 16-page booklet, however, and ML is contemplating a second printing, if there is sufficient interest. If you missed out on the first printing, and are interested in the booklet, send your reservation to the editor at Box 31, Caldwell, N. J. Send no money at this time; but watch these pages for announcement as to the second printing, if any.

The booklet sells for \$1. It contains complete instructions, charts, illustrations, a concise summary of all steps in the process and a three-color insert.

Lawson Marks 60th Year

The Lawson Co., division of Miehle-Goss-Dexter, Inc., is beginning a year-long celebration of its 60th anniversary by introducing the Leadership



line of equipment. The line will include 60", 66", and 69" Pacemaker hydraulic clamp cutters; series V65-H cutters in 46", 52" and 55" sizes; series "C" three-knife rapid trimmers; and the heavy duty Lawson Hi-Speed multiple head drills.

A special commemorative medalion has been designed, and will be affixed to all Lawson machines produced in 1958. It is also to be displayed on all stationery and promotional material throughout the year.

Purchases Giant Press

Stecher-Traung Lithograph Corp. has announced the purchase of an offset press from Harris-Seybold Co. capable of printing up to 6,000 four-color impressions per hour.

Ralph J. Wrenn, president of the firm whose Rochester, N. Y., plant installed a similar press last year, said the new equipment is the sixth multi-color press to go into operation in the company's San Francisco headquarters.

The \$300,000 machine took several days to deliver, and 35 days to assemble once all the sections arrived. It is 44 ft. long, 8½ ft. high and weighs 85 tons.

Education Conference In Aug.

The annual conference on printing education of the International Graphic Arts Education Association will be held Aug. 3-7, at Stout State College, Menomonie, Wis. The conference has been scheduled to permit a number of the craftsmen-teachers to attend the craftsmen's convention the following week in Detroit.

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Craig Named To Sun Post

Thomas J. Craig has been appointed assistant general manager, graphic arts group, Sun Chemical Corp., with headquarters at the company's offices in Long Island City, N. Y. Mr. Craig has been associated with printing ink sales, production, research and development for over 34 years. He joined Sun Chemical in 1944 as assistant general manager of its Morrill division and later served as general manager of its E. J. Kelly division and technical director of the corporation.



Prints 4,000,000,000 Comics

Western Printing & Lithographing Co. recently printed the four billionth comic book for the Dell Publishing Co., at its Poughkeepsie, N. Y. Plant.

The figure represents 20 years of association between the two companies. Western produces more than two hundred million comic books for Dell each year.

In addition to comic books, Western also produces paper back books and children's coloring and play books for the publishing firm.

Outdoor Art Contest Jan. 28, 29

More than 5,000 advertisers and agencies have been invited to submit entries for the 26th National Competition and Exhibit of Outdoor Advertising Art to be held in Chicago, Jan. 28 and 29. The competition is sponsored by the Art Directors Club of Chicago.

There will be three grand award winners in addition to recognition for the top three designs in 17 classifications.

The annual contest is designed to stimulate interest in outdoor advertising art and promote progress in the effective use of outdoor advertising. In addition it provides an incentive for those who create new ideas and techniques in outdoor art, and it recognizes and rewards advertisers, agencies, lithographers etc. for producing distinctive designs.

Rutherford Installations

The Rutherford Machinery Co., Long Island City, N. Y., has announced the following installations:

Graphic Arts Process Co., 9751 Erwin Ave., Detroit, type PLD photo

composing machine accommodating press plates up to 58 x 78".

Sutherland Paper Co., 243 E. Patterson St., Kalamazoo, type PLD photo composing machine accommodating press plates up to 58 x 78".

Southern Business Forms Co., 4609-13 Beverly Rd., Knoxville, type RMC photo composing machine accommodating press plates up to 33 x 42".

The Regensteiner Corp., 310 S. Racine Ave., Chicago, type PLD photo composing machine accommodating press plates up to 58 x 78".

Mergenthaler To Move Plant

Mergenthaler Linotype Co., Brooklyn, has announced plans to move its Linotype-Davidson division to a site somewhere on Long Island, within 50 miles of New York City.

The company had revealed at an earlier date that it was considering several sites east of the Mississippi, including two in Pennsylvania.

The decision to remain close to the city was based on consideration for the welfare of the employees as well as economic factors.

Executive, administrative, sales and research functions will remain at their present location.

The announcement was made at the conclusion of more than three weeks of discussion with union officials representing Mergenthaler employees.

An agreement was also reached to extend the present labor contract until the Fall of 1961 with some changes in the cost of living clause and wage increases starting in the second year.

Severance benefits have been provided for certain employees who may be adversely affected by the move.

George Skinner Dies

George R. Skinner, Skinner & Kennedy Printing Co., St. Louis, died Dec. 16 at the age of 65. He was a principal stockholder in the company, which his father founded in 1900.

Attends Open House

Heidelberg Southern Sales Co., held an open house, dinner and demonstration of its cylinder presses for the Houston Club of Printing House Craftsmen in November.

Produces 59" Plate

Lithoplate, Inc., a subsidiary of Harris-Intertype Corp., has started production on what the company calls the "largest, heaviest-gauge presensitized aluminum offset plate ever manufactured."



The pre-sensitized plate, measuring 47 1/4 x 59", is made of .015 gauge aluminum sheet.

Pictured is Bert Menne, vice president in charge of sales for Lithoplate, viewing one of the plates.

In addition of micro-surfacing, a Lithoplate process, the plates are said to undergo a new manufacturing process which, according to Mr. Menne, produces extra-long runs and sharper and cleaner images. Patents have been applied for on the process.

A company announcement also stated that the plate's heavier gauge provides an extra measure of strength, durability and safety.

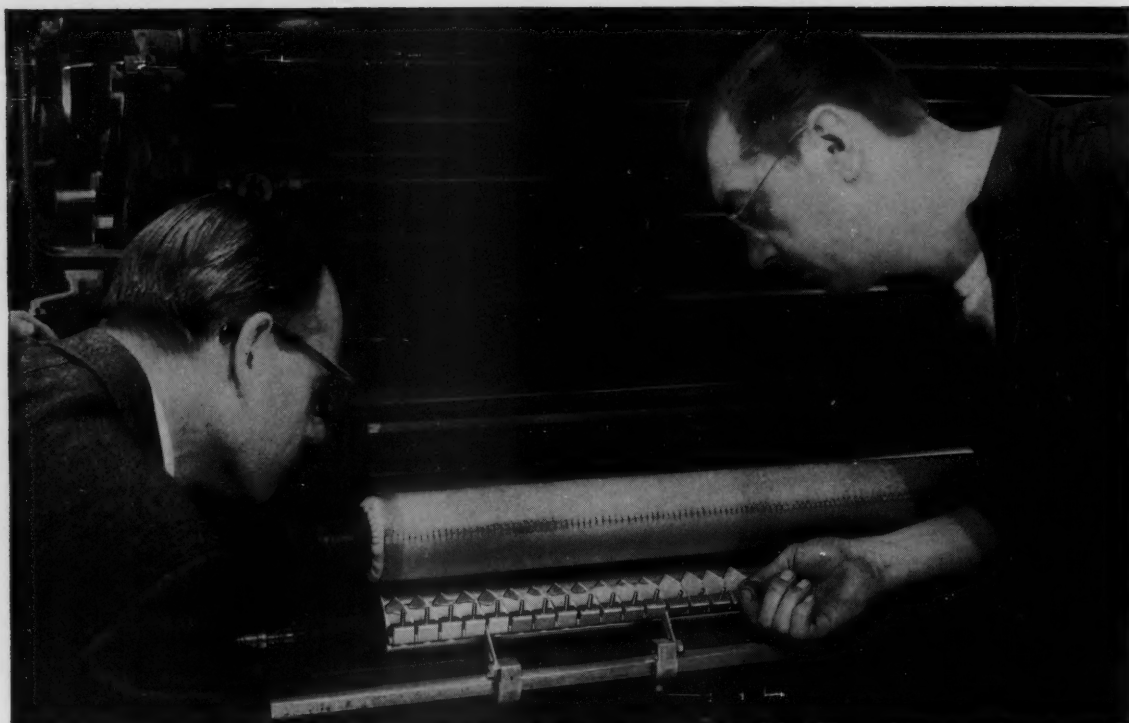
Uses Lithographed Art Booklets

Lithographed booklets of the works of Rembrandt, Van Gogh and others of the great masters are being used by Western Electric Co. as aids to better public and employee relations.

The booklets, produced by the Abrams Publishing Co., contain a dozen or more full-color reproductions of the subject artist's best work.

Purchases Present Site

Roessler Brothers, Inc., offset and letterpress printers in Cincinnati since 1899, has purchased the two-story building it has occupied for a number of years. Purchase price was about \$150,000.



Here's why pressmen really go for Baldwin® *Variable Control Water Stops*

Baldwin *Variable Control Water Stops**, designed specifically for rollers without cloth covering, give the pressman precise, positive control over water along every inch of the fountain roller and put an end to floods and dry-ups—even when running short sheets.

The unique flexible "fingers" of Baldwin *Variable Control Water Stops* make it easy for the pressman to adjust water to take care of the demands of *any* job. No longer does he have to waste time experimenting with makeshifts snipped out of paper, leather, or rubber in sheet-spoiling attempts at water control. Now, the pressman can be *sure* just the right amount of water is reaching the plate. And he can make the most precise adjustments at any stage of the pressrun without using tools.

Baldwin *Variable Control Water Stops* were field-tested on such presses as the ATF CHIEF and MANN... HARRIS 43 x 59, 50 x 72, 52½ x 77 ... MIEHLE 61 and 76 and made an instant hit

with pressmen. Their enthusiasm is shared by press design engineers, press servicemen, pressroom foremen, and others who understand the problems involved in obtaining proper dampening of the plate. And platemakers are happy to see more and more presses being equipped with Baldwin *Variable Control Water Stops* because they know plates run better.

Baldwin *Variable Control Water Stops* are easy to install and come in two lengths—8" (\$37.50) and 16" (\$47.50) to fit most standard presses. It's easy to see that they soon pay for themselves many times over in time and sheets saved. What's more, they are sure to improve quality. Baldwin *Variable Control Water Stops* are the ideal companion for Baldwin Water Levels: together, they provide the best possible assistance for *complete* water control. Write or phone today to find out how little it costs to give pressmen complete *precise* control over water.

*patents applied for

WILLIAM GEGENHEIMER CO., INC.

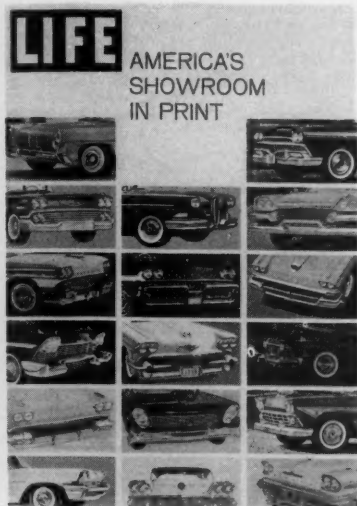
**80 Roebling Street
Brooklyn 11, New York**

Phone: Evergreen 8-6610

Manufacturers of Baldwin Ink Fountain Agitators • Baldwin Press Washers • Baldwin Water Stops • Baldwin Water Levels

Produces Unusual Piece

An 8-page, 11 x 15½" lithographed merchandising piece that includes 38 separate color subjects was produced



in only six working days instead of the normal 30 by Eastern Colortype Corp., Clifton, N. J. The piece is being used as an insert in *Advertising Age* and *Automotive News* to show how leading automobile manufacturers used *Life* magazine to introduce this year's new models.

The complete run of 100,000 copies for the two publications was delivered only two and a half weeks after the first layouts were submitted by Young & Rubicam, Inc., advertising agency, for approval by *Life*. Clearances, releases and approvals had to be obtained from manufacturers of 15 automobile models and their advertising agencies.

Production was started on a piecemeal basis as copy and artwork were approved for each of the many elements. Mechanicals were made from blueprints and progressive proofs, rather than from original art work and color copy. Copy had to be reduced to 1/6th of original size, and almost all of it had to be re-screened to bring it from 13 percent to practically 100 percent of original clarity.

According to Eastern Colortype's production department, the printing timetable began on a Friday with shooting and correcting the color plates. On Monday, the material was stripped and plates were made. Color

proofs were pulled on Tuesday and Wednesday was devoted to correcting the plates. On Thursday the printing run was started. Delivery of the first thousand copies was made to the binder on Friday morning. Air freight shipment to Chicago was made at 3 p.m. Saturday.

The entire job was done on a five-color, 77" Harris-Seybold press.

McFarlin Appointed R&S VP

William J. McFarlin, Jr., has been appointed vice president in charge of the New England division of the Recording and Statistical Corp., Boston. He was formerly general manager of the Daniels Printing Co., also in Boston.

Last September Mr. McFarlin was elected president of the Graphic Arts Institute of New England, Inc. He is a past president of the Boston Club of Printing House Craftsmen and a member of the board of directors, Society of Printers. He is also chairman of the Boston Printing Week scholarship fund committee and chairman of the advisory committee for the printing department of the Weymouth, Mass., vocational schools.

Other R & S appointments are Austin E. Nanry to general plant manager, Albert A. Richards to manager of the offset department, and John Walsh to manager of the letterpress department.

Balcom Promoted

Raymond D. Balcom has been appointed executive accountant and assistant to Everett F. Bowden, treasurer, of the Forbes Lithograph Mfg. Co., Chelsea, Mass.

Until joining Forbes, Mr. Balcom had been controller and treasurer of the Barbour Stockwell Co., Cambridge, Mass.

Thompson-Leeds Enlarges

Thomson-Leeds Co., Inc., has opened newly enlarged offices at 250 East 51 St., New York. The office layout includes operating space for each department concerned with a project, from an art and construction department to a complete display workshop.

New Post For Bassett

Gilbert W. Bassett has been appointed manager of marketing for the Miehle division of Miehle-Goss-



Dexter, Inc. He will have the responsibility of supervising the advertising, sales promotion, sales training and publicity functions of the company.

Mr. Bassett has been associated with Miehle for the last eight years. He was originally with the sales research department and more recently has been in charge of the Lithoprint sales program.

Purchases Smith-Hart

General Packaging Corp. has purchased the Smith-Hart Printing Co. in Rochester, N. Y., and announced plans to set up central offices in a new research and administration building there.

Smith-Hart will operate as a wholly-owned subsidiary, according to Craig C. Smith, president of General Packaging, with Maurice L. Schwartz, president of Smith-Hart, becoming a director of the parent company.

As a result of this move, General Packaging, with flexible packaging plants in N. J., N. Y., Ky. and Kan., is adding complete lithographing and letterpress facilities to its present services which include gravure, flexography and laminating.

THE MURRAY PRINTING CO., formerly of Wakefield, Mass., and now in its new location at Forge Village, Mass., has sold its Wakefield plant for \$190,000.

Haloid LITHOFLO* PROCESSOR...

*A Trademark of The Haloid Company

Closely controlling the variables of time, temperature, and agitation, the Lithoflo Processor automatically turns out graphic arts cut-sheet negatives of uniform high quality at low cost.



NOW!
For the first time

Automatically develop, fix, wash graphic arts negatives to uniform high quality at low cost!

Benefits of the LITHOFLO Processor . . .

- Automatic developing, fixing, washing of graphic arts negatives at speeds up to two 18" x 24" sheets per minute
- Improved negative quality
- Dramatic time and chemical savings
- Increased cameraman production time
- Accurate time, temperature, agitation control
- Sturdy construction; stainless steel protection
- Simplified operation

WRITE for further details and folder describing the Lithoflo Processor. Also ask for Haloid's new catalog of negative materials for the graphic arts.

THE HALOID COMPANY • 58-336 Haloid Street, Rochester 3, N. Y.
BRANCH OFFICES IN PRINCIPAL U.S. CITIES

HALOID®

Ideal for fine-screen reproduction . . . assures uniform dot size automatically PROVIDES . . .

- Processing time control to ± 1 second
- Temperature control to $\pm \frac{1}{2}^{\circ}\text{F}$ †
- Uniform agitation

†When Pako-Temp temperature control or equivalent is installed by purchaser.

Members of the New York Employing Printers Association's cost and production committee reviewing ratio studies for New York litho plants at a recent meeting. (l.-r.) Herman Segal, Consolidated Lithographing Corp.; Stanley Brose, Brose Offset Lithographic Corp.; Donald L. Terwilliger, D. L. Terwilliger Co.; Seymour Udell, Advertisers Offset Corp., chairman; Samuel D. Brown, Jr., NYEPA



staff, secretary; Ransford D. Triggs, Triggs Color Printing Corp.; and Edward Blank, Publishers Printing-Rogers Kellogg Corp.

Standardized Lighting Report

A standardized lighting practice for color appraisal in the graphic arts has been recommended in a special report called "Lighting for Color Appraisal in Graphic Arts," by the Research and Engineering Council of the Graphic Arts Industry. It includes recommendations for appraisal procedures and specifications for a standardized viewing light.

The research for the development of the lighting standard was performed by a color appraisal task committee under the joint sponsorship of the Research and Engineering Council and the Illuminating Engineering Society.

The information supplied in the Council's report should result in a great saving of time and money for all persons concerned with appraising color samples and proofs. In the past, the main difficulty has been that different kinds of light have been used by various individuals when viewing the same materials.

In addition to providing specifications for the standardized light, which simulates north sky daylight, the report gives recommendations for the proper colors to be used on the walls and ceilings of the viewing room. Also, it is pointed out that there are four basic color tasks necessary for the color appraisal of graphic arts reflection-type copy, proofs, and press sheets. These four tasks have to do with (1) the original color selection by the artist, (2) selecting of the pigments to be used, (3) appraisal of color quality of the printed result as compared with the original color selection, and (4) appraisal of the color uniformity of the production press sheets in comparison with the

approved proofs. Procedures to be followed in these four tasks are presented in detail in the report, which has been sent to the Council's membership.

For information regarding the availability of the report contact The Research and Engineering Council of the Graphic Arts Industry, Inc., 5728 Connecticut Ave., N. W., Washington 15, D. C.

Praises Education Council

Elmer G. Voigt, Western Printing & Lithographing Co., president of the Education Council of the Graphic Arts Industry, praised the achievements of the council in a recent speech before its executive committee in New York.

He cited the work of the group in granting 12 summer school scholarships and its program for recruiting young people.

In the past year the council has published a manual for potential recruits, issued a kit for vocational counselors, prepared an exhibit for showing at conventions, and set up a complete training and accident prevention program in addition to preparing several other manuals for distribution to various groups.

Eureka To Build Plant

The Eureka Specialty Printing Co. is planning construction of a new plant containing about 25,000 sq. ft. of floor space in San Jose, Cal. A company spokesman estimated the cost at between \$500,000 and \$600,000.

The new plant, to handle the company's customers on the west coast, will produce trading stamps and stationery.

Craftsmen's Clubs Active

The Chicago Craftsmen's Club staged its annual Father and Son night with overtones of Indians and Santa Claus, Dec. 17. Headlining the program at the Furniture Club was a noted authority on Indian lore, Old Saint Nick and a clown.

Craftsmanship took a progressive forward step in the Chicago area with the recent launching of the North Shore Club of Printing House Craftsmen at North Chicago, Ill., to serve printers in lakefront suburbs and larger cities northward from the Windy City. A large delegation from the Chicago Club participated in the charter presentation ceremony.

Another new Craftsmen's Club was organized recently at Madison, Wis., with help from the Milwaukee-Racine and Chicago clubs. The new Madison club is the first in the 6th district whose by-laws make women eligible for membership, provided they fill supervisory positions in printing plants.

Williams Named General Mgr.

James Williams has been named general manager of the Howard-Duckett Co., Kingsport, Tenn. He was formerly superintendent of the Kaufman Press, Inc., Washington, D. C.

To Open New Ink Plant

Sinclair and Valentine Co. is opening another ink manufacturing plant, in Seattle, Wash. A reception and open house tour will mark the official opening this month.

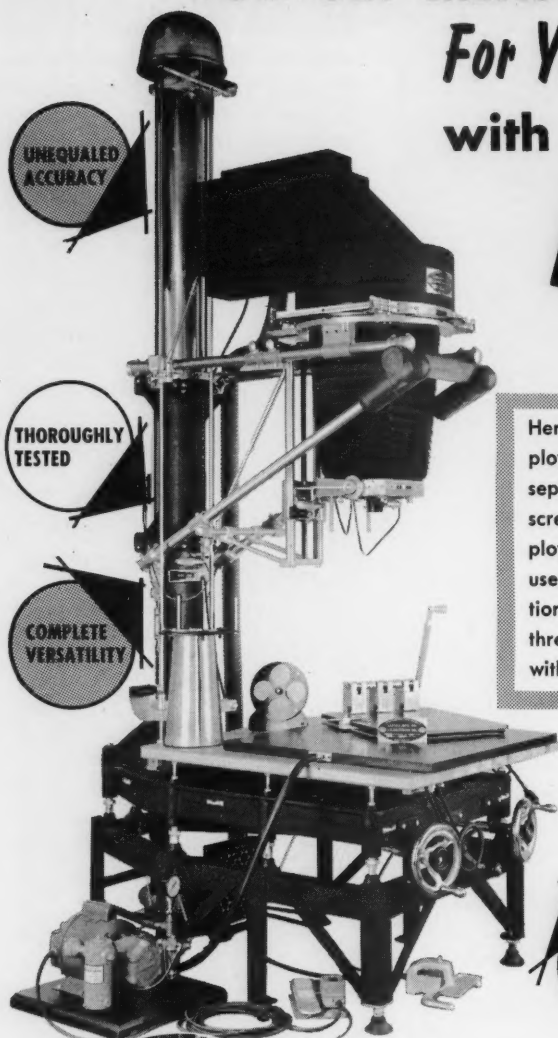
Continental scenes lithographed on frozen food packages by Lord Baltimore Press. Both scenes, designed by Lippincott and Margulies, are lithographed in five colors by Fidel-I-Tone, a Lord Baltimore process which utilizes an ultra-fine line screen. The front panel artwork carries around the end flaps to the back panels. Both items are packed in reverse end truck cartons treated with a high gloss wax finish called Par-A-Glo.



YOU GET MEASURABLY MORE For Your Money

with

CAESAR-SALTZMAN CONDENSER TYPE ENLARGERS



UNEQUALED
ACCURACY

THOROUGHLY
TESTED

COMPLETE
VERSATILITY

Here's the most versatile enlarger in the Graphic Arts field. Employing a universal light head, it can be used for making color separations direct through a mask, transparencies, filter and gray screen and gives a half tone negative on Kodalith. This unit employs a 1000 watt point source of light and a f/4.5 lens. It also uses a #302 500 watt enlarging lamp for continuous tone separations or half tone positives. Complete registration system with three-point registration is available. A vacuum easel and a punch with registration is also available to specifications.

Accessories Available:

- Three Point Glass Negative or Peg Registration System
- Lenses of Short Focal Length for Reductions
- Cones of Various Lengths for Reductions
- Variac, Voltmeter, and Voltage Stabilizer for Light Control
- Electronic Timer
- Special Positive Interlocking Lens and Camera Motion
- Precision Reducing Negative Holders
- Vacuum Easel and Vacuum Pump
- Lens Calibration and Ratio Factor Chart

OVERALL
DEPENDABILITY

PARTIAL LIST OF USERS

Mid City Litho Service
Laurel, Md.

Krug Litho Arts Co.
Kansas City, Mo.

San Francisco Police Dept.
San Francisco, Calif.

Commercial Printers
Columbus, Ga.

Courier Journal & Louisville Times
Louisville, Ky.

Miami Herald Publishing Co.
Miami, Florida

Consolidated Vultee Aircraft Corp.
San Diego, Calif.

Army Chemical Center
Edgewood, Maryland

Western Printing & Litho Co.
Racine, Wis.

Western Lithographing Co.
St. Louis, Mo.

Dept. of National Defense
Ottawa, Canada

General Electric Co.
Idaho Falls, Idaho

Process Litho Arts
Chicago, Ill.

Rochester Institute of Tech.
Rochester, N. Y.

Shorecolor
New York, N. Y.

Daily News
New York, N. Y.

Process Litho
Chicago, Ill.

Caterpillar
Peoria, Ill.

Case-Hoyt Corp.
Rochester, N. Y.

Ford Motor Co.
Dearborn, Mich.

Daily News
McKeesport, Pa.

Eastman-Kodak
Rochester, N. Y.

Pringle & Booth, Ltd.
Toronto, Canada

C. F. Braun & Co.
Alhambra, Calif.

McCall's Magazine
Stamford, Conn.

Knapp Engraving
New York, N. Y.

Wm. Becker Studio
New York, N. Y.

King Studio
Chicago, Ill.

The Osborne Co.
Clifton, N. Y.

Goodyear Aircraft
Akron, Ohio

COUNTERS ON CAMERA AND LENS MOTION

Write For Complete Literature

Headquarters for Professional Photographic Equipment Since 1920



J. G. SALTZMAN, INC.

SALES DISTRIBUTORS for CAESAR MANUFACTURING, INC.

480 Lexington Avenue, New York 17, N. Y.





Van Wormer



Hawkins

Announces Two Appointments

McCormick-Armstrong Co., creative printers and three-time winner of Printing Industry of America awards, recently announced the appointment of W. J. Van Wormer, Jr., vice president, as manager of the firm's advertising agency division.

Theodore Hawkins, assistant art director, has been promoted to fill the vacancy created by Mr. van Wormer's appointment. Messrs. van Wormer and Hawkins collaborated on winning campaigns and individual specimens of self-advertising for PIA exhibitions in 1954, 1955 and 1957.

Appointed Waldemar Press Mgr.

Edward P. Tokarz has been appointed general manager of the Waldemar Press, Indianapolis. He was formerly with the Dearborn Lithographic Co., Chicago.

Howard W. Sams, board chairman, recently assumed the additional title of president on the resignation of Joseph C. Collins, who left the firm to reactivate the Joseph C. Collins Co., general printers.

NAPL Retains Grunerwald

Michael Grunerwald, a litho craftsman with 31 years of practical and managerial experience, has been retained by the National Association of Photo-Lithographers to advise NAPL members on problems concerning shop materials, plant equipment and procedure. NAPL members desiring his services may simply contact NAPL headquarters.

LTF Forum In Syracuse

LTF color movies with synchronized sound will be used in a two-day litho shop practice forum sponsored by the Syracuse Club of Printing House Craftsmen on Feb. 21 and 22.

Michael H. Bruno, Frank Preucil

and Wade Griswold of the Lithographic Technical Foundation will conduct a question and answer period throughout the entire forum.

The subjects covered will be "Seeing Light and Color," "Color Reproduction and Masking," "How to Make Better Halftones," "Plates on the Press," "Paper Troubles on the Press," "Avoiding Trouble with Ink," and "Instruments to Make the Job Better."

The forum will take place at the Hotel Syracuse.

Predicts Good Year For Forms

Manufacturers of printed forms for business use can expect a good year in 1958, Gregson L. Barker, president of UARCO, Inc., predicted in his annual report released last month. Sales of printed forms were at a record high in 1957 and, assuming that general business activity continues close to the same level, the forms business in 1958 will be as good or better than this, he opined. He pointed out that industry wide volume of printed forms, used for records, sales, production, inventories, payrolls and tax payments, is believed to exceed \$400,000,000 a year, making this one of the largest segments of the printing industry.

UARCO reported sales of \$33,944,817 in the fiscal year ending Sept. 30, an increase of 15 percent from the preceding year. Sales are expected to rise again in 1958, although percentage-wise they may not be as high as in last year, he added.

Office automation and mechanization is playing a big part in increased use of printed forms, he remarked. This enables executives to base business decisions on more business facts than ever before and, by the same token, they tend to increase the scope of their efforts to obtain quickly an increased number of reports and statistics. As office functions are automated, he asserted, the number of record forms is increased without extra clerical costs.

UARCO operates a plant in Chicago with 178,508 sq. ft. of space, largely devoted to lithographic printing. Just completed at Watseka, Ill.,

is a \$2,000,000 plant for rubber plate printing. This has been built alongside another plant there which has been in use for several years. Other UARCO plants are located in Cleveland, O., Oakland, Calif. Deep River, Conn., and Paris, Texas.

Three Use Pitman Grants

Sons of three lithographers are presently attending the college of their choice with a substantial portion of their first year's expenses paid by the Harold M. Pitman Co.

The three, winners of the company's 1957 scholarship awards, can qualify for a continuation of the grants by attaining a "B" average, or the equivalent, in their college courses.

The winners are Stephen M. Slavin, son of Allen E. Slavin, a platemaker at the Crafton Graphic Co., N. Y.; Lanning D. Seitz, son of Alfred C. Seitz, foreman of the art and camera department of Empire Color Litho, Inc., N. Y.; and Richard P. Rosenquist, whose father, Paul Rosenquist, is a photo-composer and platemaker at Western Printing & Lithographing Co., Racine, Wis., and president of Local #54, Amalgamated Lithographer of America.

LTF Surveys Quality Control

The Lithographic Technical Foundation is conducting a survey to determine the present extent of quality control in the lithographic industry. Questionnaires, which will be kept confidential, have been sent to all members.

The questionnaire contains seven questions presented in any easy to answer format. They cover all phases of quality control and its application in plants. A question on whether companies would be interested in a cooperative research program with LTF on quality control is also included.

GA Group To Hold Course

The Graphic Arts Association of St. Louis announces a course in advance estimating to begin at the association headquarters, Jan. 13. Enrollment fee is \$85 per enrollee, for a class of 20 or more. If less than 20 enroll the fee will be \$100.



Alvin Taylor (l.) and Vincent Cacaro (r.) who have been appointed to the national sales staff of Chemco Photoproducts Company Inc. Mr. Taylor moves from an administrative position in the Dallas branch to the sales staff of the same area. He has been with Chemco nine years, starting as a shipping clerk. Mr. Cacaro, with a 10-year background in the graphic arts, is with the mid-west region sales force which has branches in Chicago and Detroit.

Starts Color Course

The Manhattan School of Printing began its new color separation courses for lithographic cameramen on Dec. 2. Classes are being held twice a week in the school's photo-offset annex at 72 Warren St., New York City.

Under the direction of Mel Mark, two specialized courses and a general one are being given. There is a basic course to equip the student as a color separation cameraman and an advanced one for improving techniques. The third course is a general appreciation course for production, sales and other personnel desiring a general knowledge of this field.

Cites Place Mat Industry

Printed place mats, a specialty product featured by many lithographers, acquired new status recently in a resolution endorsed by the American Society of Association Executives. Addressed to the Printed Paper Mat Institute and the Linen and Lace Paper Institute, the trade organization executives cited them for their "outstanding public relations program to help close a gap in this country's defenses against disease."

Litho salesmen should benefit by that public relations program, which included distribution of a significant report compiled by Syracuse University sanitary scientists on fountain and restaurant sanitation, which showed that bare table tops may be a

serious source of contamination. Health departments throughout the country received copies of the report, while a film strip on methods of table top sanitation was made available to food handlers' schools. Pamphlets were also offered restaurants and fountains and material on the research report was prepared for many publications in the field.

Wins In Damage Suit

The St. Louis Globe Democrat has been awarded \$20,000 in a damage suit against the St. Louis Typographical Union No. 8.

The suit was filed by the Globe against the union in a controversy over the time-stamping of advertising copy. Members of the union refused to handle time-stamped copy.

The company contended that time-stamping was necessary in determining composition costs so that extra costs resulting from excessive composition, alteration and revision could be passed along to advertisers. It was further contended that the union breached its labor contract in refusing to permit the issue to be decided by the union's joint standing committee or by local arbitration.

It is said that an attorney for the union argued that time-stamping was an "innovation" and imposed a new working condition which was not covered or authorized by the existing labor contract.

Has Education Week Tour

Stecher-Traung Lithograph Corp., Rochester, N. Y., played host to more than 100 high school principals and guidance counsellors during Education Week.

The group was conducted on a tour of the company plant and entered into a discussion of career opportunities in the graphic arts industry.

Stecher-Traung annually awards a four-year scholarship to an area high school senior to attend Rochester Institute of Technology.

Creative Printing Discussed

A detailed picture of the progress of a creative printing job from conception to completion was given by representatives of Sanderson Brothers, Inc., lithographers, North Abington, Mass., at the recent meeting of the Junior Advertising Club at the Hotel Statler, Boston. Five experts in their respective fields spoke.

Holds Unusual Dinner

The Printers Supplymen's Guild of Chicago held its annual beefsteak dinner, minus eating utensils, on Dec. 6, at the Furniture club.

More than 600 members of the Guild attended the dinner which was followed by a drawing for 75 prizes valued at from \$20 to \$25. The ticket stubs were drawn from a raffle barrel by two professional models, attired to conform to police regulations—no more. Is there any significance in the fact that a James Lawless, Printing Machinery Co., assisted party chairman Joseph McConnaughey, Harris-Seybold Co., in the arrangements?

M-G-D Open House In Dallas

Miehle-Goss-Dexter, Inc., is holding an open house demonstration in its new Dallas showroom during Printing Week, Jan. 13-18.

On display will be equipment produced by each of the divisions, sharing an office together for the first time. Printers from Texas, Oklahoma, Arkansas and Louisiana have been invited to the exhibits, and an evening school will be held for technical personnel.



**GEVAERT
MAKES
QUALITY
LOOK EASY...**

And with Gevaert, quality comes easy, too. Time, temperature, developer—lots of things can go wrong. So it makes big sense to use the film with man-size *forgiveness* ... GEVAERT.

You'll get a lot more, too. Wiry detail, hard clean dots on a rugged film that dries fast and flat. Plenty of room to juggle in developing. No halos, and fog stays down even when this film is forced.

We've been making friends since 1894 by making quality come easier for cameramen. Have we made your acquaintance yet?

LITHOLINE O 82p FILM — maximum contrast, highest sensitivity, latitude and resolving

power. Polystyrene base for utmost stability.

O 81 LITHOLINE ORTHO — 0.003" thick; thin base for line or screen positives or negatives.

O 82 in regular base, same emulsion — 0.006" thick.

P 23 FILM — a fast panchromatic emulsion. Long gradation, high resolving power, wide latitude in exposure and development. Ideal in color separation work.

GRAPHIC P 2 PLATE — for making separation negatives from color transparencies or copy. Same photographic characteristics as P 23 film.



THE GEVAERT COMPANY OF AMERICA, INC.

SALES OFFICES AND WAREHOUSES AT

321 West 54th Street, New York 19, N. Y.
6601 N. Lincoln Ave., Lincolnwood, Ill. (Chicago)
6370 Santa Monica Blvd., Los Angeles 38, Calif.
9109 Sovereign Row, Dallas, Texas
In Canada: Gevaert (Canada) Limited
345 Adelaide St., West, Toronto 2-B, Ontario

Weber Receives Sales Post

Paper Manufacturers Co., Philadelphia, has appointed Charles R. Weber sales representative for the territory covering metropolitan New York, Massachusetts, Rhode Island and Connecticut. Mr. Weber has been associated with the paper industry since 1941, and has a background that includes export, manufacture and sales of paper and paper products. He has been with Paper Manufacturers Co., since early 1956.



Starts New Offset Magazine

A new monthly trade magazine, Farm Store Merchandising, to be printed by offset, has been announced by Miller Publishing Co., Minneapolis, with regular publication to begin next September. It will be directed at the farm supply store retailer. Emphasis on color, illustrations and charts will be featured.

ATF Reopens St. Louis Branch

American Type Founders has opened a new branch at 1931 Washington Ave., St. Louis. The company closed its offices there several years ago when the territory covered by St. Louis at that time was reassigned.

The new branch will cover the southern part of Illinois, half of the state of Kansas, St. Louis and Kansas City.

Henry Krumm is branch manager in charge of sales and Andy Paulos is office manager in charge of service. A three day open house, Nov. 7, 8, 9, presented two of the ATF offset Chief 15 presses, a 11 x 15," and the Chief 24 which is a 17 x 24" offset.

In addition, the showrooms display Challenge cutters, Challenge drill presses, stitchers, Chandler & Price cutters and other composing room equipment. Invitations were sent to St. Louis printers and an advertisement, inviting the general public, appeared in a local paper.

New Hawthorne Sales Program

The Hawthorne Paper Sales Co., Kalamazoo, Mich., has started a direct-to-the-printer sales program. William Slavin, Hawthorne president, decided on the move as a result of a

printing industry survey made by an independent management organization. The findings of this survey, supported by personal calls of the Hawthorne sales staff, indicated a practical economy and service to the printer that are reflected in lower paper costs for all segments of the printing industry, the company states.

DRUPA Scheduled For May 3-16

DRUPA, the International Print and Paper Fair to be held in Düsseldorf, Germany May 3-16, 1958, will consist of items of interest to everyone in the Graphic Arts and related industries, according to an advance announcement.

Printers from all over the world are planning to attend the technical, historical and printed works exhibits spread out over an area of 220,000 sq. ft.

Lithographers will be especially interested in the multi-color presses and the possibilities for photo mechanical means of plate reproduction, in addition to all the new improvements and developments in equipment, materials and methods gathered from all over the world.

Holds Emblem Contest

Recent organization of Printing Industry of Illinois from the former Graphic Arts Association of Illinois has brought home the realization that the change of name calls also for a new emblem. The present emblem has, for more than 30 years, remained essentially the same. A contest to find a new emblem has been instituted, by the group for which the first place prize will be \$100, second place \$50, and two Honorable Mention prizes of \$25 each. Deadline for entries is January 30.

3M Promotes Urmson

Harlan U. Urmson has been promoted to product sales manager for printing and duplicating products of the international division of Minnesota Mining & Manufacturing Co.

Mr. Urmson joined 3M in 1951 as a tape salesman and has been with the international division for the past year.

Visual Week Apr. 1-10

Plans for Visual Communications Week, marking the 1958 Visual Communications conference and the 37th annual exhibition of advertising and editorial art and design, sponsored by the Art Directors Club of New York, were announced last month.

The exhibition will be held at the Waldorf-Astoria Hotel from Apr. 1 through 10. The awards luncheon will take place Apr. 1, and the visual communications conference on Apr. 2 and 3.

King To Talk In Dayton

Howard King, typographic consultant for Harris-Intertype, will present three lecture-demonstration sessions at a one-day typographic workshop in Dayton, O., Mar. 29.

Reservations can be made by contacting Dillen H. Gaskill, president, Dayton Club of Printing House Craftsmen, 214 S. Wilkinson St., Dayton 2.

MASA Names Convention Site

The 1958 convention of the Mail Advertising Service Association International has been scheduled for the Chase-Park Plaza Hotels, St. Louis, Sept. 5-8. It will immediately precede the 41st annual convention of the Direct Mail Advertising Association.

One thousand creators and producers of direct mail advertising are members of MASA. For information on the convention or exhibit space, write to convention manager, MASA International, 18120 James Couzens Highway, Detroit 35.

S&V Closes Detroit Plant

Sinclair and Valentine Co. closed its Detroit plant Dec. 1. In announcing the move, Matthew J. Leckey, president of S&V, pointed out that the recent expansion of the Kalamazoo facilities had been planned with the Detroit closing in mind.

Frank Cumberland, Detroit branch manager, will continue to represent the company in that area. Other employees have been given an opportunity to transfer to the Kalamazoo plant.



DAVIDSON INK COLOR *Guide*

demonstrates quality reproduction



Davidson Corporation's Ink Color Guide, a handy pocket-size book planned especially for small offset machine users, is yours for the asking!

The guide shows specimens of 33 popular Davidson inks for offset reproduction — from rich blacks for uniform coverage to colors of exceptional strength and brilliance. All inks are shown in solid and three screen values as well. It's a cinch to pick the ink to match the job — all the way up from the type and solids to the finest tint blocks, halftones and highlights.

Davidson Offset Inks produce more quality impressions per pound than other offset inks... Why?... because the pigments are milled extremely fine for smoother, more uniform coverage. The inks "work" well, too! They dry fast on the printed sheet, resist emulsification and maintain strength long after other inks have faded away. — *Get your copy of the Color Guide*



See Davidson

EMBEE *finest*
little folding machine

Davidson Embee Folding Machines are ideal for *small* folding jobs. They fold all the small-sheet work while the big folders keep busy on the large-sheet, long-run jobs. Thus, you fold all jobs at the lowest cost... avoid costly set-ups and breakdowns... make full profit on every job. Two Embee models available — Model 230 for sheets up to 9 1/2" x 18"; Model 360 for sheets up to 13 1/2" x 27". Check coupon for demonstration.

Headings in ProType • Text in Linotype



DAVIDSON CORPORATION
A Subsidiary of Mergenthaler Linotype Company
29 RYERSON STREET, BROOKLYN 5, NEW YORK
Distributors in all principal cities and Canada

DAVIDSON CORPORATION
29 Ryerson Street, Brooklyn 5, N. Y.

- ☐ Send Davidson Ink Color Guide
☐ Arrange Embee demonstration

Name _____

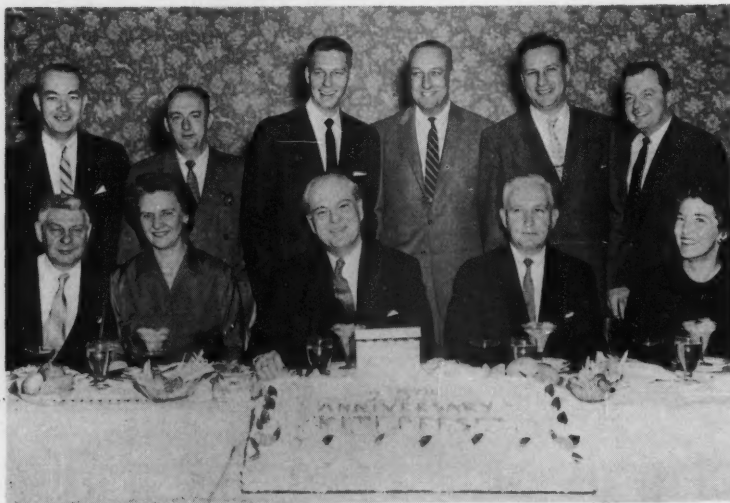
Firm _____

Street _____

City _____ Zone _____ State _____

ML 1-3

Kipe Offset Celebrates 25th Year



Officers, guests and honored employees of Kipe Offset Process Co., at the 25th anniversary dinner. Seated (l.-r.) Charles Simunek, vice president and plant manager; Irma Nymark Nemeth, secretary-treasurer; Horace S. Kipe, president; Howard Lambert, 25-year employee; and Mrs. Kipe. Standing (l.-r.) Ernest Nemeth; Howard Wagner, 23-years; Joseph Bauer, night supervisor, 22 years; Theodore Broadston, eastern sales manager, Harris-Intertype Corp.; Max Greenberg, accountant; and Edward Macaulay, vice president.

EMployees of Kipe Offset Process Co., Inc., gathered at the Brass Rail Restaurant in New York Dec. 6, to celebrate the 25th anniversary of the company. The firm was started in 1932 with seven employees and one press. Today it has 130 employees and seven presses.

Horace S. Kipe, president, and one of the three founders, reviewed the history and growth of the company, and presented service pins to long-time employees.

Mr. Kipe began his career in lithography as a salesman with the National Process Co. After two years with that firm he joined Edward C. Knieriem and Dr. Charles Moore to start Kipe Offset. "We started with \$9,000 and lost \$7,000 the first six months," Mr. Kipe recalls.

In 1957 the company exceeded \$2,500,000 in sales, an increase of more than 50 percent in a two-year period, he told ML. This very substantial increase has taken place under the leadership of Edward Macaulay, vice president and general sales manager.

Kipe's field is definitely top quality lithography, and a high percentage of

their work is in color. The single-color jobs are produced primarily by the Ky-Vure process developed over the past eight years by the company. This process lends itself particularly well to high-type book work, brochures, annual reports, etc.

Charles Simunek, another Kipe vice president whose responsibilities

are primarily in quality control and research, developed the process in a series of experimental runs which culminated in the achievement of a more continuous tone effect in half-tone printing. The Ky-Vure process is designed to match some of the effects obtained in high-quality gravure.

The Kipe plant is located at 145 Hudson St. in downtown New York. It occupies 40,000 sq. ft. on four floors. In 1932, when the company began operations in the same building it occupied only 1,600 sq. ft. on one floor.

In line with its rapid growth the company has recently purchased a second 52½ x 77" Harris two-color press. It also has five other Harris presses, a 23 x 35" two-color, a 41 x 54" one-color, a 42 x 58" two-color, a 50 x 69" two-color, and a 50 x 69" one-color. Photographic equipment includes two Lanston Monotype cameras and three Lanston step-and-repeat

(Continued on Page 129)



One of a series of promotional pieces distributed by Kipe Offset Process Co.



Some of the Kipe staff attending 25th anniversary dinner.

UNIFORMITY



Bedini

For trouble-free press performance...specify Consolidated Double Coated Offset Enamels

Maximum uniformity is just one of many improved performance features resulting from Consolidated's double coating of offset printing papers. You get greater stability and superior pick resistance, too. All add up to better runability—better results.

What's more, you get these important double coating advantages in every Consolidated grade at no extra cost—PRODUCTOLITH, CONSOLITH GLOSS and CONSOLITH OPAQUE.

Free trial sheets are available from your Consolidated Paper Merchant. Compare performance and cost with any offset paper you are now using. You'll see how

Consolidated Double Coated Offset Enamels offer top values in quality and trouble-free performance!

Available only through your Consolidated Paper Merchant

Consolidated

ENAMEL PRINTING PAPERS
a complete line for offset and letterpress printing
CONSOLIDATED WATER POWER AND PAPER COMPANY
SALES OFFICES: 135 S. LA SALLE ST. • CHICAGO 3, ILL.



A farewell luncheon attended by 60 members of the Graphic Arts Association and the Associated Lithographers of Kansas City, was held recently to honor Malcolm G. Pittman. Mr. Pittman is moving to Jacksonville, Fla., to become general manager of the Douglas Printing Co. He recently resigned his position as sales representative for Spangler, Inc. Within the last 22 years he has been branch manager of the Western Newspaper Union, and a vice president and general manager of Greiner-Fifield Lithographing Co. He has also been chairman of the Associated Lithographers, an officer and director of the Graphic Arts Association, and a director of the Lithographers National Association. Pictured are (l.-r.) S. D. Goller, chairman, Associated Lithographers; Paul C. Fifield, member of the arrangements committee; Mr. Pittman; and W. F. Ashcraft, president, Graphic Arts Association.

Clawson To Harris Adv. Post

William T. Clawson has been promoted to director of advertising and promotion for Harris-Intertype Corp., Cleveland.

Mr. Clawson was previously sales promotion manager for Harris-Seybold Co., a division of Harris Intertype. He joined the firm in 1956 after 10 years with Miller Printing Machinery Co. as advertising manager and director of marketing.

Well known in the printing and publishing industry, he has been active for many years on various committees for Printing Industry of America, Inc. and the Direct Mail Advertising Association. He has also been a frequent speaker at Printing House Craftsmen's meetings, having spoken in 46 of the 48 states.

GA Exhibit Scheduled

The Delaware Valley Graphic Arts exhibit is scheduled to be the feature attraction of Printing Week in Philadelphia Jan. 13-16, at the Benjamin Franklin Hotel.

Closing date for entries was Nov. 18 with a committee of five selecting the entries to be exhibited.

All selections are being classified

in three groups according to the total number of employees of the printer of the entry. Three awards will be presented to the best pieces in 17 different categories.

Start New Company

Ebert Jensen and Donald E. Lueder have established the Cromografic Co. at 469 6th St., San Francisco. The two partners, formerly color specialists at Walker Engraving Co., San Francisco, will operate their company as a trade shop, primarily for supplying color separations and halftones to the lithographic industry. Equipment includes a 31" Robertson Comet camera.

Holland Speaks To GA Group

Color printing was the subject of an illustrated lecture by O. C. Holland of New York City, director of advertising, Printing Ink Division, Interchemical Corp., at an annual dinner meeting of the Graphic Arts Association of Cincinnati on Dec. 4 at the Hotel Sinton. Officers for the coming year were elected, and annual reports were submitted by Wilbert Rosenthal, club president and John D. Rockaway, managing director. Members of the Miami Valley Lithographers Association, Cincinnati Litho Club and other area graphic arts groups and their wives were guests.

Thomas A. Moore Dies

Thomas A. Moore, officer and director of Whiting-Plover Paper Co., Stevens Point, Wis., and director of the George Whiting Paper Co., Menasha, Wis., died Nov. 20.

He had been a director of Whiting-Plover for 10 years and assistant secretary and assistant treasurer for the last seven.

Bank Note Firms Consolidate

The Security Banknote and Columbian Bank Note Companies have announced a consolidation of their businesses. The new company, to be called Security-Columbian Banknote Co., will deal in the production of stock certificates, bonds, foreign currencies, stamps, checks, financial printing and allied types of printed matter.

Ink Plant Capacity Doubled

Howard Flint Ink Co. has installed additional equipment in its Patterson, N. J. plant to more than double the manufacturing capacity of the three-year old factory.

Under the supervision of John F. Devine, company vice-president, the plant is primarily concerned with the development, manufacture, and servicing of lithographic, metal decorating, letterpress and packaging inks. Technical and service personnel are under the direction of Frederick Dankert.

Card Co. Earnings Up

The United States Playing Card Co., Cincinnati, reported net income of \$1,491,069, equal to \$3.87 per share of common stock, after all charges and taxes, for the nine months ended Sept. 30. For the like period a year earlier, net earnings were \$1,369,291, or \$3.55 a share. Directors declared a dividend of \$1 a share of common stock, payable Jan. 1, 1958.

K-C Conducts Tours

Kimberly-Clark Corp. staged the first of a winter series of personally conducted tours of its plants for the benefit of Chicago graphic arts groups on Dec. 5 and 6, with the Society of Typographic Arts, Chicago, as their first guests. Touring the companies mills and other facilities at Neenah and Kimberly, Wis., the Chicago commercial artists saw paper made by automatically controlled processes and packaging of varied paper products.

Being artists, they also took much interest in the new office building at Neenah which is widely noted as a fine example of contemporary architecture and layout, which takes light and landscape into the building.

To Build Plant In Miss.

Sumner Williams Co., East Boston, has announced plans to establish a plant at Jackson, Miss., for the purpose of manufacturing offset plates. The building will occupy a 22,760 sq. ft. area on a city-owned industrial site.



COLOR PHOTOGRAPH BY ANTON BRUEHL

Gallery of Letterhead **ANTIQUES**

REMEMBER THESE CHROMOS? Woodcut pictures of the plant. Steel engravings of the founder. Company names replete with Spencerian flourishes. Elaborate trade marks. It hasn't been too long ago since these were commonplace letterhead elements, but where do you find them now?

There have been immense changes and improvements in letterhead paper, too. As a look at HOWARD BOND will tell you, it has a whiteness, a crispness, a quality of texture that has never been surpassed in a paper of its grade. It is, in every sense, a proper paper for your letterhead, and a distinguished vehicle

for your business correspondence.

Ask your printer or paper distributor to show you samples of HOWARD BOND. Chances are you'll join the thousands of American businesses who use it for every letterhead need.

PRINTERS! *This message appears in advertising magazines read by your customers.*

HOWARD PAPER MILLS, INC. • HOWARD PAPER COMPANY DIVISION, URBANA, OHIO

Howard Bond

"The Nation's

Business Paper"

Companion Lines: Howard Ledger • Howard Mimeograph

Howard Writing • Howard Posting Ledger

Printed on Maxwell Offset



Basis 80—Camberra finish



Doesn't color reproduce better on Maxwell Offset?

Howard Paper Mills, Inc. / MAXWELL PAPER COMPANY DIVISION / Franklin, Ohio

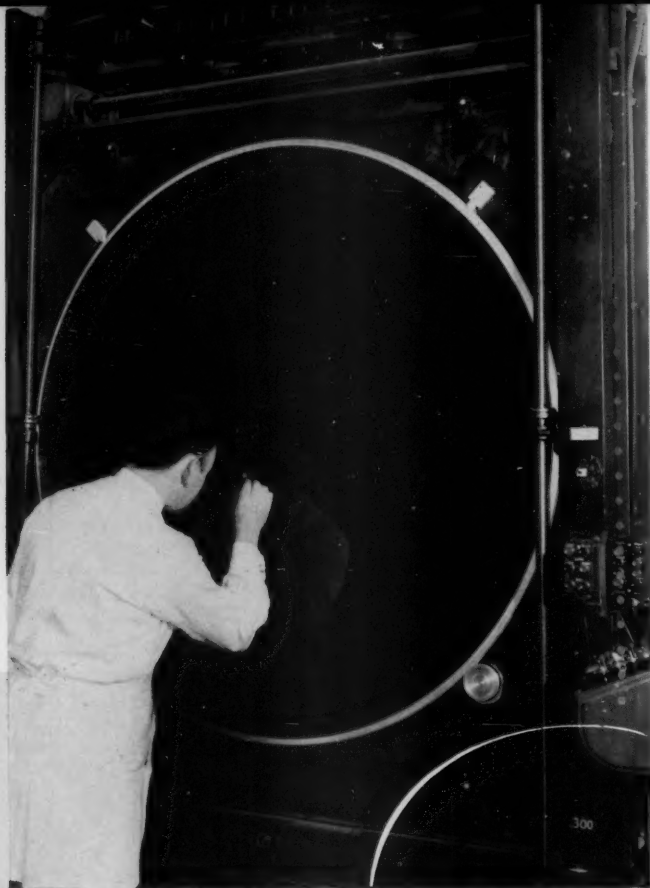
We'd be pleased to send you samples of our eight finishes and two tints

Printed on Maxwell Offset—Basis 80—Camberra finish





"Switzerland"
Scene of the '57 Graphic Exposition
Plates by
MUELLER COLOR PLATE CO.



This huge 60" Consolidated color precision camera is equipped with a 60" circular screen and multiple register devices.

Mueller



This color process art department handles color correction and dot etching to exacting color values.



Large areas are etched and dots reduced to conform to necessary values for quality reproduction in this efficient dot etching department.



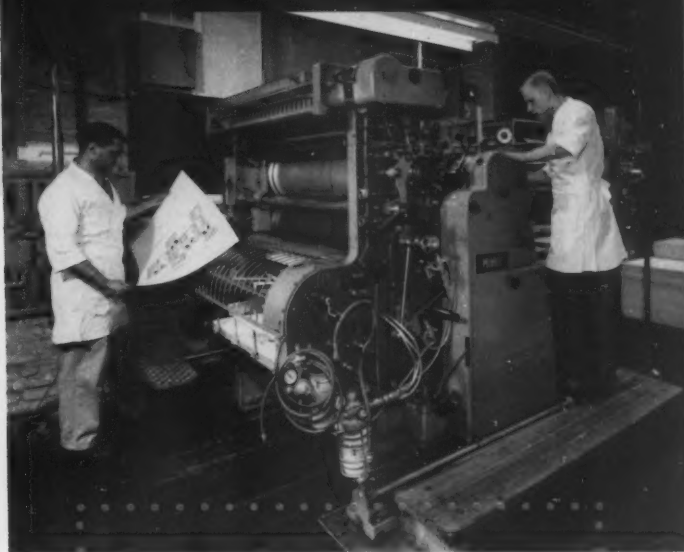
Modern camera department showing three of our battery of 20 precision cameras ranging in size from 24" to 60".

Skilled artists assemble positives or negatives in preparation for press plates in this well staffed layout department.

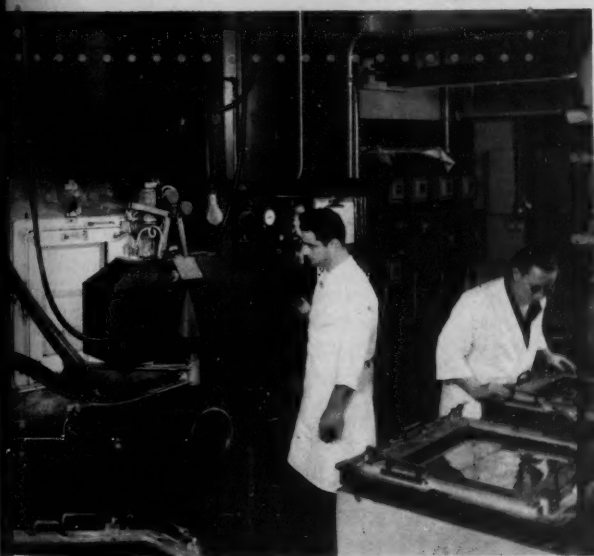


HIGHEST QUALITY REPRODUCTIONS

Press plates are composed to precise layouts on the Rutherford Photo Composing Machine.



This 36" Miehle Offset Press is teamed with other automatic presses proofing plates up to 59" in size to furnish clients with proofs run under exact press conditions.





EQUIPMENT
AND SPACE
SPECIFICATIONS

FLOOR SPACE:

Milwaukee plant, 65,000 square feet
Chicago plant, 5,000 square feet
Battle Creek, Mich. plant, 10,000 square feet

PLATE DEPARTMENT:

4—Rutherford photo composing machines, maximum plate size 76"
1—monotype maximum plate size 59"
12—coating whirlers
Double sinks
Ink up tables
Down draft developing tables
10—vacuum printing frames

CAMERA DEPARTMENT

20—Cameras in the following sizes
3—24" line and halftone
14—color precision cameras in sizes from 24" up to 60",
1—36" Prismatic camera
Screens in rulings —
120 — 133 — 150 — 200 lines

PROOFING DEPARTMENT

8—presses with maximum print area
28" x 36" 35½" x 48"
36" x 38" 39¼" x 59"
29½" x 42½"
3—59" presses equipped with automatic dampening
1—36" Miehle offset press.

SALES OFFICES:

- Milwaukee, Wis., 2320 N. 11th St. Locust 2-1611
- Chicago, Ill., 549 S. Wells St. Wabash 2-3070
- Detroit, Mich., 416 Stephenson Bldg. Trinity 3-0332
- New York City, N. Y., 520 — 5th Ave. Murray Hill
- Battle Creek, Mich., 600 Dickman Road Woodward
- Denver, Colo., 220 Dexter St. Dudley



EXCLUSIVE PRISMA-COLOR PROCESS

MUELLER COLOR PLATE COMPANY *Milwaukee, Wisconsin*

A Big Litho Cost: Spoilage

PROBABLY the most important problem facing business today, and lithographers in particular, is the difficulty in seeing that profit after taxes is in keeping with capital investment and sales for the year. There are many factors involved in profit making, not the least of which is costs not included in hourly rates.

The situation in which every item of cost is included in selling prices, is seldom, if ever reached by most lithographers. If we are to reach the objective of picking up all of our costs, day by day in the normal course of business, we must constantly examine our business to bring these hidden costs to light so that we can determine what part they play in reducing profits.

One of the largest dollars and cents costs most commonly forgotten by lithographers today is spoilage, here, there and everywhere. Many lithographers have no idea of the amount of money that errors, makeovers and the like, can, and do cost them each year. In my travels, I have visited many printers and lithographers. It is rare indeed to see a General Ledger Spoilage account in operation. One of the best ways for a lithographer to gather time and material spoilage data is to set up a system so the foreman or the individual worker makes out a spoilage report outlining all the pertinent facts on spoilage such as job number, the department where the spoilage occurred, the cause of spoilage, the cost of materials, and the direct labor time involved.

It goes without saying that the bookkeeping department with this spoilage report in hand can then price out spoilage work and post such costs to a Spoilage account. This account of course should be credited with any credits received from mills or suppliers for faulty materials.

Such a record, accurately compiled for an accounting period, will yield good basic information which can be included in new budgeted hourly rates. These reports also are beneficial to management since they will enable it to correct the causes of spoilage and if possible to eliminate or at least cut down spoilage losses.

From an address delivered at the 25th Annual Convention of the NAPL, Chase-Park Plaza Hotels, St. Louis, Sept. 12, 1957, by Frank R. Turner, Jr.

Elects Jake Ward President

Members of the Houston Litho Club elected Jake Ward president for the forthcoming year. He is with Wetmore & Co. Robert Chester, Shell Development, was elected vice president; Frances Porter, Smith & Co., secretary; and Henry Marchwinski, Southern Printing, treasurer.

Active board members are Otis Muckenfuss, May Printing & Lithographing; Leslie Kasparik, Gulf Printing; Grady Caldwell, Caldwell Printing; Kenneth Joseph, Adco Press; and John L. Brand, Gulf Printing.

Associate board members are Harry Folk, Howard Flint Ink; Robert Chalander, L. H. Kelly Co.; and William

McGonagle, E. C. Palmer Paper Co.

The club held its annual Christmas party in conjunction with the Houston Craftsmen's club. Jack Elliot's band supplied music for dancing, and the graphic arts suppliers of the area provided gifts for all the ladies present. The evening was climaxed with a breakfast at midnight.

At the December board meeting, out-going board members attended to acquaint the newly elected members with their duties.

The board discussed, and approved, an invitation by the Houston Graphic Arts Association to hold a combined meeting in February at which time a film of the International Trade Fair at

Lausanne, Switzerland will be shown.

It also voted to contribute to the Lithographic Technical Foundation's building fund, and accepted an application for membership from Homer Benson, Wilson & Co.

In addition, committees were assigned to various jobs to prepare for the upcoming Eighth Annual Southwest Litho Clinic, June 20-22, at the Rice Hotel in Houston. (For additional information see page 64)

Uses New Kodak Color Process

After 11 months of experimental work with the Kodak short-run color process, Burns-Allwright, Ltd., London, England, is believed to be one of the first British companies to offer it as a service.

The company recently completed its first job, from original Kodak Ektachrome to finished job, in less than 12 days for Revlon.

The process requires no new materials, employing standard equipment with "know-how," based on extensive research. It produces a wide color range on high grade paper and gives no dot patterning in very fine screens.

Albany Firms Merge

Printing and reproduction facilities of the Argus Co., a letterpress plant and the Greenwood Co., an offset printing plant, both in Albany, N. Y., were merged Jan. 1. The newly formed company will set up operations at 1031 Broadway.

Kenneth A. Hamilton, Argus president, will head the corporation. Howard Watrous, Greenwood vice president, will be in charge of production.

Hewitt Named Intertype VP

William L. Hewitt, controller of Intertype Co., has been appointed to the position of vice president, operations.

Prior to joining Intertype nearly four years ago, he was vice president and controller of Arma Corp., and was previously associated with the General Electric Co.

The company has also announced the appointment of John T. Roth as director of manufacturing. He was formerly works manager and is succeeded in this post by Charles T. Schildhauer.

Imagination

Wonderful world of childhood, the toy shop is a place to entice and delight the growing imagination.

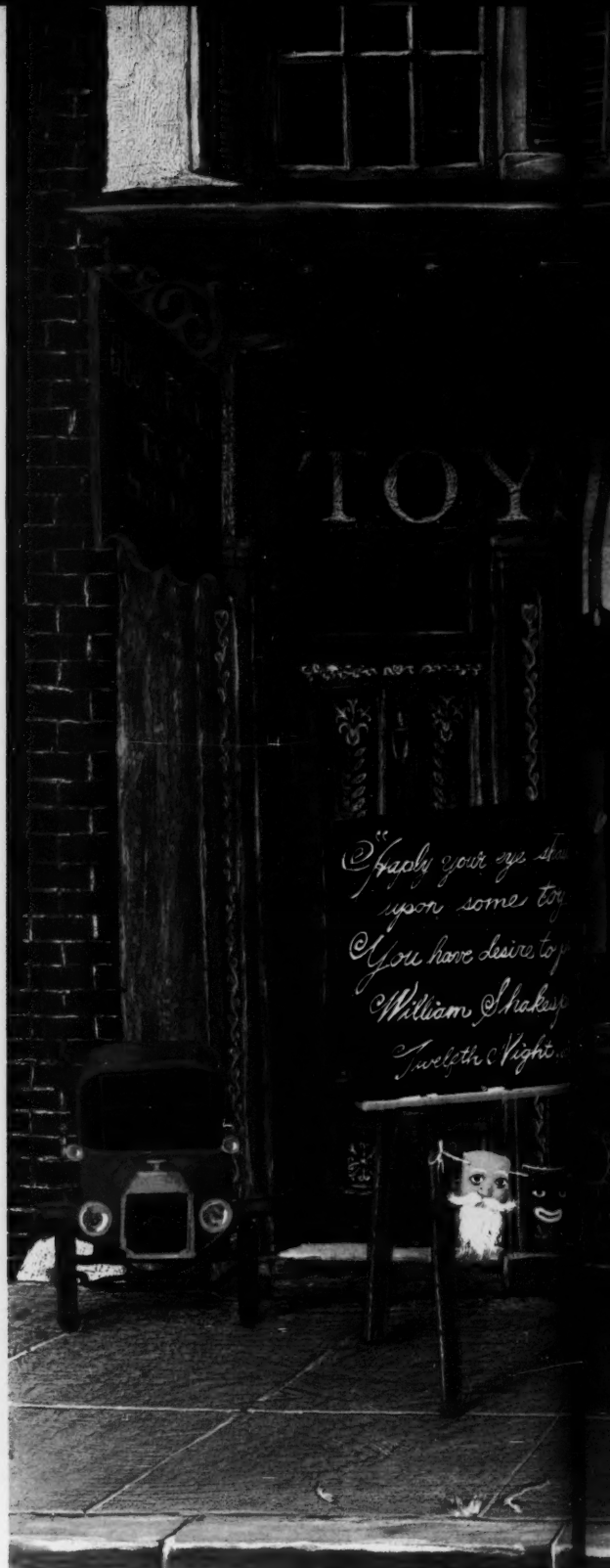
Imagination is a form of energy that matures but never grows old. Every step of human progress is made in the mind before this step is actually taken. By imagining a better way of doing things, Americans have led in achieving a better life, showing the way for others.

Printing has always been the first and foremost method of stimulating public imagination. In helping the printer and advertiser to create consumer interest in products and services, *Westvaco* fine papers have carried ideas to the American public for more than a half century. When a *Westvaco* Quality paper is selected, hi-fi performance of pictorial reproduction is assured. Like the *Pinnacle Offset*, *Blue White (Vellum)*, used here, these fine papers are specifically made to meet the press requirements of each printing technique.

See for yourself how imagination in printed ideas helps to sell goods and services. *Westvaco Inspirations*, Number 209 brings you a round-up of stellar talent, with suggestions for profitable uses of ink and paper. You may obtain this issue without obligation by merely phoning or writing to any of the Company addresses appearing below or to your nearest *Westvaco* distributor.

Cover Artist

Robert Sivard, who was born in New York in 1914, was educated at Pratt Institute, the National Academy of Design and the Academie Julien in Paris. He worked at mural painting and commercial art before serving for four years with the U. S. Army, followed by a period as consulting Art Director in Switzerland and five years in Paris in the American Embassy. Successful exhibitions of his work, held at the Salon des Beaux Arts and the Galeries Craven and Charpentier, won him a wide reputation. His first exhibition in New York in 1955 attracted the attention of many American collectors. Among others he has exhibited at the Carnegie International.



Westvaco Quality Papers

Sales Offices:

230 Park Avenue, New York
35 Wacker Drive, Chicago
503 Market Street, San Francisco



Toy Shop, by Robert Sivard
From the Midtown Galleries, New York

West Virginia Pulp and Paper Company

INCREASE YOUR PROFITS

Through More Lithographic Sales

1. What are hourly costs for lithographic operations in your plant?
2. What is a fair mark-up on paper, film, ink, plates, and outside purchases insofar as you, your salesmen, and your customers are concerned?
3. Do you have lithographic production standards?
4. When your pressroom is overloaded and you work unscheduled overtime, how can you recover this cost from customers?
5. What is a fair way to compensate lithographic salesmen?
6. Where can you get copies of forms used to schedule work through many well-managed lithographic plants?
7. What is the best kind of self-advertising for a lithographer?
8. Where can you get building and floor plans for lithographic plants recently built?
9. Where can you secure an outline of the job duties of all officers, superintendents, foremen, and key personnel in a lithographic plant?
10. Where can you get case histories on Trade Custom disputes over ownership of negatives and plates, etc?
11. When do the economics of a lithographic plant justify adding additional presses, photo composing and graining equipment, etc.?
12. How can you secure Budgeted Hourly Rates for your plant?

These are vitally important questions, every one of which deals with the management of your business, both today and tomorrow. You, no doubt, have many more questions on your plant operations on which you would like to have prompt and sound answers.

The NAPL constantly receives requests for every kind of information from its large and growing membership in the United States and other countries. The NAPL has answered all of the above questions and many more for its members.

If you are a lithographer, a printer, a firm who sells the industry, or even if you have no equipment, you can have complete information of every phase of lithographic management by joining our aggressive trade association work. We offer a great deal for very little.

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS

317 West 45th Street, New York 36, N. Y.

..... 1958

We hereby make application for enrollment as an active (Associate) Member in the National Association of Photo-Lithographers.

We enclose herewith \$. as our first year's dues.

ANNUAL DUES FOR THE PRESS EQUIPMENT IN OUR PLANT IS AS FOLLOWS:

No. of Presses	ACTIVE MEMBERS (Those who operate lithographic equipment)	
	Presses smaller than 17" x 22" (Minimum Dues \$50.00 per year)	\$20.00 per press per year \$
	Presses 17" x 22" to 22" x 28"	\$28.00 per press per year \$
	Presses larger than 22" x 28" up to and including 35" x 45"	\$37.00 per press per year \$
	Presses larger than 35" x 45"	\$47.00 per press per year \$
	MINIMUM DUES, \$50.00 per year.	
	ASSOCIATE MEMBERS—Equipment and Supply Dealers, \$125 per year	
	Total Annual Dues	\$

Firm

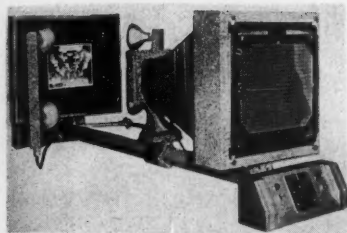
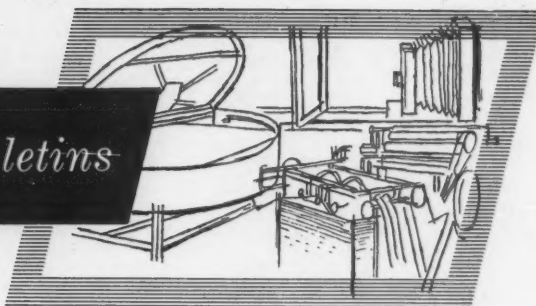
Name of Individual

Address

City Zone State

Signed Phone

Equipment, Supplies, Bulletins



The Sharpshooter camera now being marketed by the Miller-Trojan Co., Troy, O., which sells for \$795. Included in the standard equipment is a 10 3/4" Wollensak Raptar lens, hand-calibrated stainless steel focusing scales, an automatic five minute reset timer, and four 300-watt reflector-flood exposing lamps. The camera weighs approximately 150 lbs. and is 71 1/2" long. It can take Kodak auto-screen film for making halftone negatives. Further information is available from the company.

To Produce Fast Head Drill

Production of a heavy duty multiple head drill, capable of drilling round or slot holes in lifts as high as 2 1/4", at a speed of thirty strokes a minute, has been announced by the Lawson Co., division of Miehle-Goss-Dexter, Inc.

The machine is said to acquire its speed through fixed table construction combined with recently developed engineering techniques.

An illustrated folder on the machine, called the Hi-Speed drill, is available from the company, 426 West 33rd St., New York.

Offers Texoprint Movie

A movie illustrating some of the characteristics and applications of Texoprint plastic printing paper has been produced by Kimberly-Clark Corp.

The film demonstrates how Texoprint can be cleaned, sewed, folded, grommeted, glued and die cut. It emphasizes strength and suitability for full-color printing.

It also shows some of the special

applications of Texoprint, including children's washable books, sales broadsides, manuals, instruction sheets, maps, charts, training aids, flip charts, and others.

The 16mm film can be obtained for free group showings by writing to the Texoprint advertising dept., Kimberly-Clark Corp., Neenah, Wis.

NAPL Issues Cost Rate Book

The National Association of Photo-Lithographers has sent a revised version of "A Study of a Simplified Method for Building Budgeted Hourly Cost Rates in a Lithographic Plant" free to all its members.

The 76-page study shows the procedure for computing budgeted hourly cost rates, and it can be used as a format in setting up budgeted hourly rates in plants.

Included is a computation showing all of the details going to make up budgeted hourly cost rates for almost every lithographic cost center.

Additional copies are available to NAPL members for \$10, and to non-members for \$25.

Issues Densitometer Bulletin

A bulletin on the Macbeth-Ansco densitometer model 12-A has been issued by the Macbeth Daylighting Corp., Newburgh, N. Y. Copies are available from department P. 10 of the company.

Double Plant Size

Gregory & Falk, San Francisco lithographic plate makers, have doubled the size of their plant in the past year to allow increased production capacity. A new Robertson Comet camera and auxiliary equipment have been added.



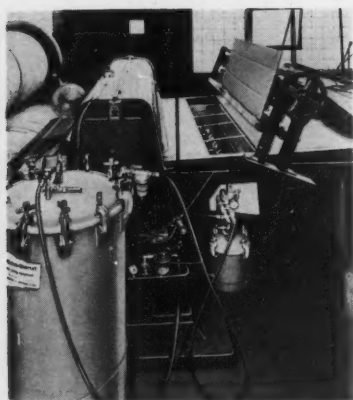
An electric saddle stapler developed and engineered for the printing and book-binding industry by Swingline, Inc., Long Island City, N. Y. The machine is capable of stapling 120 pages consisting of 60 lbs. coated stock. It has a 10" throat, and plugs into any AC light socket. The staplers can be set up in tandem or as many as five can be activated in unison from a single foot pedal switch.

Offers Portfolio Negatives

The Metropolitan Lithographers Association, Inc., is making available to purchasers of its portfolio, *Lithographers' Operating Forms*, negatives of any selected forms at trade rates, either in the original size or the reduced size as they appear in the portfolio.

The portfolio includes reproductions of specimens ranging from estimates and job bags, through the various lithographic departmental payroll forms. Different forms are included for small and large plants.

Interested companies can write the association, 33 W. 42nd St., New York 36.



Ortman-McCain Co., Chicago, has reported the development of a new system for applying effective non-skid coatings directly at the corrugator. Testing of the automatic Non-Skid Applicator shows that it meets customers' specifications for effective non-skid on both regular and special work, the company states. It is also reported that the unit steps up production, improves quality of printing and reduces over-all costs. It can be installed directly on the combiner ahead of the sheet cut-off and below the web. Wired directly to the corrugator, the unit operates entirely automatically so that no production time is lost.

Introduces German Press

A German hand-fed flat-bed offset press with automatic inking and dampening, which operates at speeds up to 850 impressions per hour, is being offered by Amsterdam Continental Types and Graphic Equipment, Inc.

Called the Kalle 17, the press, designed and manufactured by the Kalle works of Wiesbaden, West Germany, features a refrigerated plate bed which provides automatic dampening through condensation of moisture.

It accommodates a maximum paper size of 13 x 18", and printing area of 12½ x 17½".

Further information is available from the company, 268 Fourth Ave., New York.

New Suggestion Form

Automatic Canteen Co., Chicago, has streamlined its suggestion system by throwing away the customary suggestion box in favor of a handy self-mailing suggestion form, developed and produced through cooperation with UARCO, Inc., Chicago lithographers of business forms. The 2-ply, carbon interleaved self-mailer enables an employee to outline his proposed suggestion briefly, clip and retain a

5-inch numbered coupon and drop the form, after sealing, into a mail box anywhere. Another identically numbered coupon is filled out by the company and returned to the employee as an official acknowledgment. All postage is paid by the company.

Adapts Camera For Xerography

Kenro Graphics has developed an adjustable adapter head which permits use of its Vertical 18 camera for the xerographic process.

The adapter head is 26 x 15½ x 2" and is adjustable from left to right and for top alignment. It is interchanged with the standard film head by setting it into the camera top recess. It can accommodate standard xerographic plates used with 10 x 15" class offset presses and duplicators.

Introduces Light Table

A 30 x 40" light table, #LT-42, has been introduced by nuArc Co., Inc., 824 S. Western Ave., Chicago 12.

The table is of all-metal construction and is finished in a silver hammerloid baked enamel. It has machined steel straight edges, adjustable for perfect alignment, the company states.

The LT-42 has a 30 x 40" ceramic glass area, is 36" high and has two shelves for storage space.

Complete information is available in bulletin #217 issued by the company.

Offers Offset Plate

Polychrome Corp., Yonkers, N. Y., has introduced a new offset plate for proof press applications called the Polychrome P/C Kote. It has a plastic fibre base.

With the plate, type is set, cuts inserted and then the compositor locks it up in a proof press. He inks the type and lays down a P/C Kote offset plate. The plate is then put on an offset duplicator and the job is run off. The company states that this process permits quick breakdown and re-use of type, and that the offset plate can be filed for future use.

Additional information is available from the company, 4 Ashburton Ave., Yonkers, N. Y.

Offers Nebiolo Typefaces

Typefaces designed and manufactured by Societa Nebiolo of Turin, Italy, will be distributed to American

**MICROGRAMMA
BOLD EXTENDED**

MICROGRAMMA BOLD

**MICROGRAMMA
EXTENDED**

MICROGRAMMA

MICROGRAMMA CONDENSED

printers and graphic artists by Amsterdam Continental Types and Graphic Equipment, Inc.

First of the list of Nebiolo faces to be offered is Microgramma, an all-capital sans-serif series available in regular, extended, condensed, bold and bold extended weights.

Samples of this face in all sizes, as well as price lists and showings of other Nebiolo designs, may be obtained from the distributor, 268 Fourth Ave., New York 10.

Blotting Paper Sampler

The Sorg Paper Co., Middletown, O., has issued a sampler of selected sales blotters printed on various grades of the company's blotting papers. Copies are available from the company.

Anso Issues Film Bulletin

Anso, Binghamton, N. Y., has issued a special products bulletin on its tape recording film FPC 42-1.

The bulletin gives the uses of the blue sensitive material, now available in limited quantities for experimental purposes, and a full description of its characteristics. Included is information on processing, and the formula for the developer.

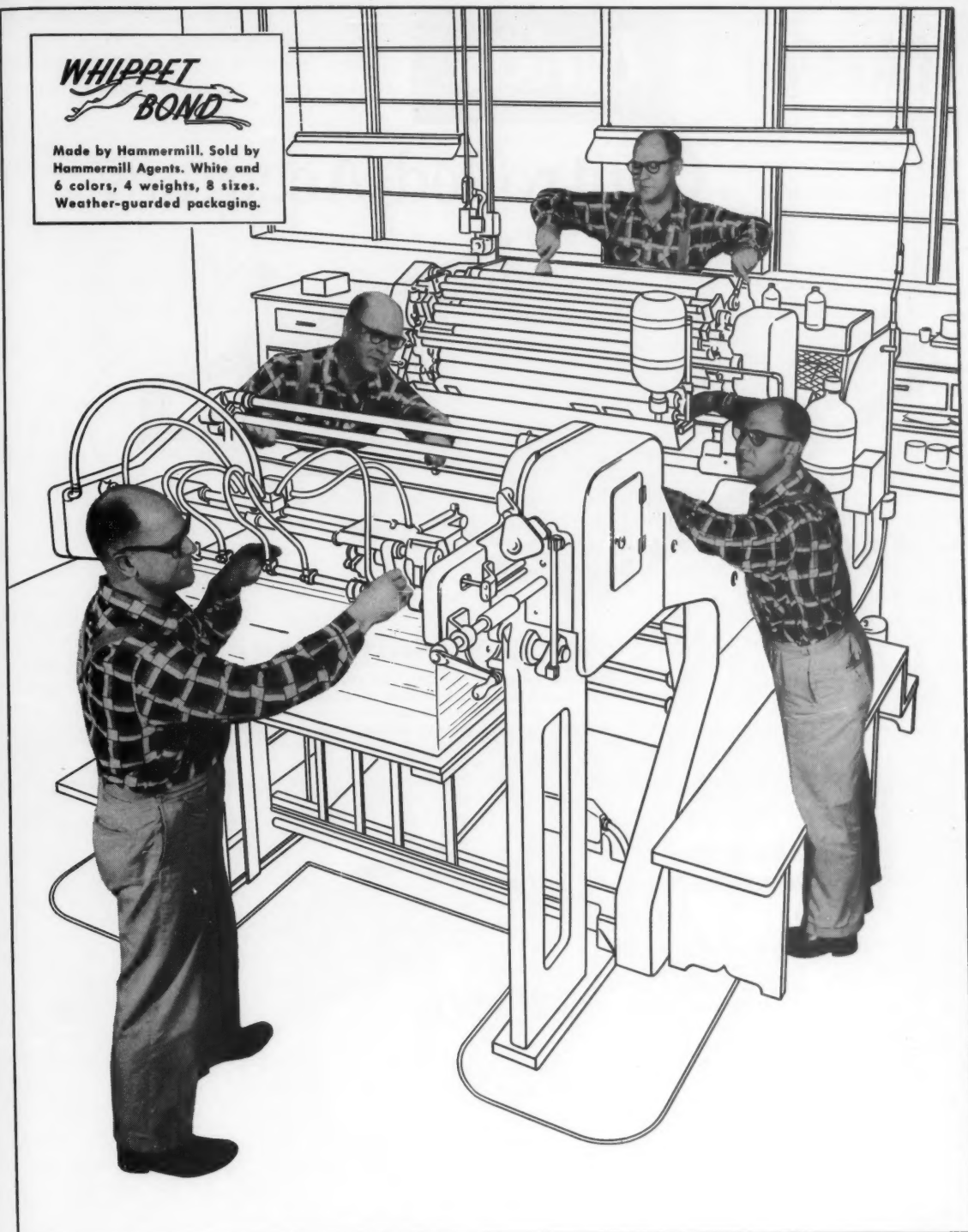
More Helpful Hints

The latest in the series of "Helpful Hints for Printers," published by the Paper Manufacturers Co., Philadelphia, includes answers to 38 common ink problems.

The information is presented in the form of a chart which includes the complaint, method of detection, possible cause and possible remedy.

**WHIPPET
BOND**

Made by Hammermill. Sold by
Hammermill Agents. White and
6 colors, 4 weights, 8 sizes.
Weather-guarded packaging.

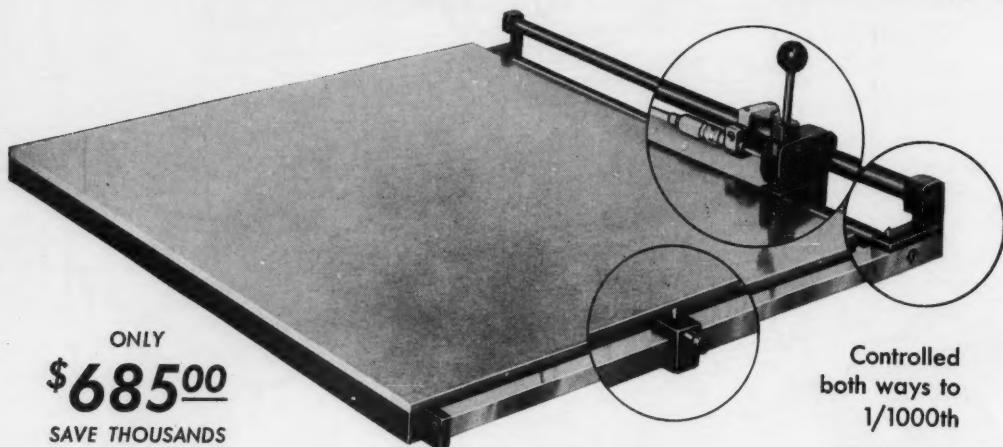


*You don't have to be four places at once when
you run uniform Whippet Bond on your press*

FOR MORE ATTRACTIVE PRINTING, THE NEW BLUE-WHITE

Chesley F. Carlson

Controlled Accuracy



ONLY
\$685⁰⁰
SAVE THOUSANDS

Controlled
both ways to
1/1000th

THE CARLSON PHOTO-COMPOSING SPACER.

Accurate to 1/1000th, this Carlson Photo-Composing Spacer does the work of machines costing thousands in stepping multiple negatives or on plates. Utilizing this proven, accurate punch-and-hole system with micrometer control, the Carlson Spacer operates at 4-times the speed of hand stepping—while maintaining perfect dot-for-dot register. Write for full details.

THE CARLSON STEP-AND-REPEAT PUNCH

This is practical equipment for the smaller lithographer. Although this is a fine precision-made, all-steel punch which steps with hair-line accuracy, it costs only a few dollars. The Carlson Punch utilizes our proven punch-and-hole system. It provides lock screw setting of three point optical finder, 24" etched stainless steel rule and self-aligning throat-stop for controlled accuracy with Carlson Master Strips. Write for details.



ONLY
\$89.50

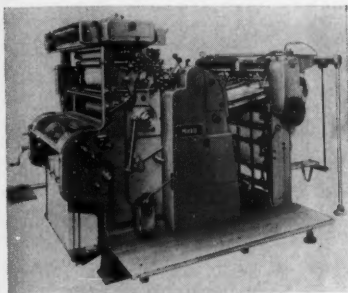
NOTE: Any time within 18 months after purchasing a Carlson Step-and-Repeat Punch, you may trade it in at full price on a Carlson Photo-Composing Spacer.

Chesley F. Carlson Company

BEN FRANKLIN BUILDING • MINNEAPOLIS 15, MINNESOTA

New Miehle 25 Offset Press

The Miehle Co., division of Miehle-Goss-Dexter, Inc., has introduced an offset press which will handle a maxi-



mum sheet of 19½ x 25" at speeds up to 7500 impressions per hour.

The press will be available for demonstration in Chicago this month, and shortly afterwards in other cities. It has been designed as a job press for the offset industry.

New Simco Static Bars

Simco Co., 920 Walnut St., Lansdale, Pa., has announced two new types of static eliminating equipment, specifically designed for cleaning dust and dirt from plastic parts, plastic and

paper sheets and films, textile materials, rubber, leather and all other types of surfaces to which dust is being attracted and held electrostatically.

In the static bars provision is made for simultaneously blowing off the dirt and neutralizing the static charges on both the dirt and the part being cleaned, the company states.

Reports New Negative Paper

A negative paper that makes two positive black-on-white copies, for reduced costs of multiple reproductions, is reported by the Copease Corp., New York.

The new paper, introduced by Agfa especially for multiple copy requirements, can produce two copies from every negative without special developer or change in exposure dial settings. This results in cutting paper costs and saving time, the company states.

Further information is available from the company, 425 Park Ave., New York 22.

Offers Papermaking Booklet

"The New Art of Papermaking," a 38-page booklet detailing the story of paper in non-technical terms, is being offered free of charge by dealers of Kimberly-Clark printing papers.

Illustrated with 60 pictures and drawings, the booklet supersedes "From Trees to Printing Press" issued in 1944.

Printed in two colors on double-coated stock, the booklet traces the history of papermaking, shows the structure of paper, outlines papermaking procedures and explains the basic methods of preparing pulp.

GA Spring Catalog Available

The spring 1958 catalog for books and materials for letterpress and offset lithography, published by Fred W. Hoch Associates, is ready for distribution.

The economic hourly cost rates for all operations in letterpress, offset, and bindery are offered in the book.

Copies are available from the publisher, 461 Eighth Ave., New York.

GOERZ

If You're Production-Wise . . .

ARTAR IZE!



GOERZ RED DOT ARTAR

The Lens for the Graphic Arts

Whether it's color or black and white, your camera is only as good as the lens in front of it. That's why leading Graphic Arts camera manufacturers recommend and use GOERZ RED-DOT ARTAR Lenses. ARTAR-IZE your camera for quality production . . . keep up with your competition!

Consult us on special lens requirements.

Office and Factory: C. P. GOERZ AMERICAN OPTICAL COMPANY, Inwood 96, L. I. N. Y.

SCREEN TINTS

20" x 24"

\$ 5⁰⁰
each

22" x 28"

\$ 7⁵⁰
each

Latest developments in the manufacture
of halftone tints allows us to offer you these
tints at this SENSATIONAL NEW LOW PRICE.

- **UNIFORM DOT**
- **QUALITY CONTROLLED**
- **FIELD TESTED AND NOW USED IN BETTER LITHO SHOPS**
- **UNCONDITIONAL GUARANTEE**

SPECIFICATIONS

SCREEN: 120 LINE — 133 LINE — 150 LINE

VALUES: 20" x 24" — 10% to 80%

22" x 28" — 20% to 80%

THICKNESS — .005

PACKED: same value — 2 sheets to a tube

THINBASE: prices on request

WRITE FOR BROCHURE AND NAME OF LOCAL DEALER

ROLL-O-GRAPHIC Corp.

133 PRINCE STREET, NEW YORK 12, N. Y.

Issues Sheet Folding Data

Different techniques for folding 52 x 76" sheets coming from 76" presses are described in detail in a four-page folder, available from American Type Founders, 200 Elmora Ave., Elizabeth, N. J.

The "product information booklet" discusses the different conditions under which 52 x 76" jobs may be printed work-and-turn or sheet-wise. Included are bindery costs, production figures and schematic drawings of four ATF-Camco 52 x 76" folding machines.

Introduces Multi-Bar

The J. Curry Mendes Corp., Canton, Mass., has announced a semi-automatic collating and tipping machine called the Multi-Bar. It features a patented device for glue control. The manufacturers state that it is adaptable to payroll check forms, statement forms, calendar mountings and many other items.

Offers Stripping Knife

X-acto, Inc., Long Island City, N. Y., is offering a cutting knife with interchangeable blades for stripping negatives. It has a patented, vise-type clamp and collar which hold the blades securely.

New Business Press Folder

A new six-page folder describing the special features of the ATF-Webendorfer line of business forms presses is now available on request from American Type Founders Co., Inc., 200 Elmora Ave., Elizabeth, N. J.

The folder describes the new standard offset and rubber plate presses which are available in 17 and 22" cut-offs with 26½ maximum web width. Included are photographs and schematic drawings showing the web travel through the various units of the machines.

New Polyester Film

A heat-sealable polyester film that looks like aluminum foil but can be flexed almost indefinitely without affecting film properties, has been announced by Minnesota Mining and

Manufacturing Co., St. Paul, Minn. It is a metalized version of the firm's Scotchpak brand heat-sealable polyester film.

Prepares Export Price List

Chemco Photoproducts Co., has prepared a 12-page booklet which illustrates and describes its principal equipment and supplies now available for export. Prices shown are applicable only to export. Copies are available from the company.

Bar-Plate Expands Line

The Bar-Plate Manufacturing Co., Orange, Conn., has announced the addition of chemical storage and mixing tanks and the Micro-Perfect dot etching table to its line of photo-mechanical equipment.

The tanks are available in 5, 10, 25 and 50 gallon sizes. The dot etching tables come in sizes from 20 x 24" up to 62 x 84" and are equipped with three-way fluorescent lights. Special sizes are available by order.

SCATA-GLAZE
BLANKET and ROLLER WASH
and PRESERVATIVE
**1-STEP
WASH-UP**

REMOVES GLAZE

PRESERVES AND REVITALIZES
REMOVES HARD DRIED INK
and Glaze from rollers and
blankets
RESTORES LIFE AND SPRING-
INESS to rubber rollers
DISSOLVES READILY all types
of ink resins, waxes, driers, dyes
and varnishes
SCATA-GLAZE is an excellent
combination solvent for general
pressroom use

NON-TOXIC
Contains no
carbon
tetrachloride
or other
chlorinated
solvents
"Flash Point Over
100° Fahrenheit"

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Mamaroneck 9-0574 | New York: CAnal 6-4111



Zenith PLATE WHIRLER

DESIGNED BY SPECIALISTS FOR THE EXACTING CRAFTSMAN

Perfectly coated plates every time with this long lasting Zenith Whirler!

- Smooth operating aluminum turntable whirls at high speed, assures uniform distribution of coating.
- Exclusive air filter on heater-blower safeguards coating against damage from dirt and dust.
- Forced air from thermostat-controlled heater dries plates quickly, evenly, thoroughly.
- Perfectly counterbalanced aluminum lid floats with finger-tip control when unlatched.

- Front edge of lid is hinged down so as to be always within easy reach.
- 80% opening for easy insertion of metal plates and glass.
- Automatic water control for plate washing.
- Superior construction for a long, productive life: tub of tough, durable copper; turntable and drive equipped with extra heavy duty ball bearings; rugged welded structural steel base.

The most modern, best equipped plants across the nation use Zenith Plate Whirlers.

The most modern, best equipped plants across the nation use Zenith Plate Graining Machines

ZARKIN-ZENITH—THE WORLD'S FINEST LINE OF PHOTO-MECHANICAL EQUIPMENT FOR LITHOGRAPHERS, ENGRAVERS AND PRINTERS



Zenith
PLATE WHIRLER



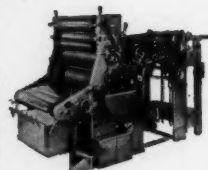
Zenith
PEDESTAL PLATE WHIRLER



Zenith ELEVATING TYPE
VACUUM PRINTING FRAME



Zenith PEDESTAL TYPE
VACUUM PRINTING FRAME



ROYAL ZENITH 29
SINGLE COLOR OFFSET PRESS



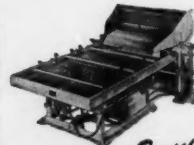
Zenith
TEMPERATURE CONTROLLED
DEVELOPING SINK



Zenith DOWN DRAFT
DEEP ETCH TABLE



Zenith LAYOUT and
STRIPPING TABLE



Zenith
PLATE GRAINING MACHINE

ROYAL ZENITH 29 Single Color Offset Press — perfect companion to the Zarkin-Zenith line. Takes a BIG 23" x 30" sheet — at the profit-producing speed of 50,000 impressions per shift with top quality. Modern plants across the nation are using the Royal Zenith 29 to produce more profit-full jobs! And you'll be amazed at the surprisingly low initial cost!



ZARKIN MACHINE CO., INC.

THE FINEST IN PHOTO MECHANICAL EQUIPMENT SINCE 1928

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Jomac Issues Bulletins

Jomac Inc., Philadelphia, has issued a series of bulletins on its protective clothing line, manufactured by Jomac-North, a company recently organized by Jomac and James North & Sons Ltd., London.

Offers "Idea Book"

Additional uses of gummed label paper is the theme of an "Idea Booklet" being issued by The Brown-Bridge Mills, Inc. Designed as an aid to printers and lithographers, the booklet contains dozens of samples of different types of labels and stickers.

Free copies are available from the company, Troy, O.

Macbeth Densitometer Booklet

Macbeth Daylighting Corp., Newburgh, N. Y., is offering a bulletin presenting the detailed story of the Macbeth-Ansco Densitometer model 12-A.

Copies are available from dept. P. 10 of the company.

NW Paper Issues Booklet

A lithographed pamphlet has been issued by Northwest Paper Co., Cloquet, Minn., on its line of Mountie Offset Antique Wove papers. Nine colored swatches are included with specifications and weights.

Hoffman To Brintnall Co.

Karl Hoffman has joined the Harry W. Brintnall Co., San Francisco, as sales engineer. He has been associated with the graphic arts for the past 30 years.

Mr. Hoffman will be in charge of an expansion program aimed at photoengravers and lithographers.

He is a past president of the San Francisco Club of Printing House Craftsmen.

Pressmen Extend Contract

A three-year extension of the working conditions and fringe benefits obtained in a contract that expired Oct. 1, was agreed to by the Union Employers Section and the Houston Printing Pressmen and Assistants Union #71. Increases in the hourly base pay wage for cylinder pressmen

amount to 15 cents effective Oct. 1, 1957, five cents effective Oct. 1, 1958, and five cents effective Oct. 1, 1959. All other classifications will be increased proportionately.

Book Clinic Tours Photopress

Photopress, Inc., was host recently to the Chicago Book Clinic at its Broadview, Ill. plant. Some 175 members and guests toured the three-year old litho plant under the guidance of Edward J. Chalifoux, president, and his executive staff.

Hill To Sales Post

The Dayco division of Dayton Rubber Co. has appointed Harlin B. Hill, Jr., as roller sales engineer for the New England area and New York state, with headquarters in Boston. For the past ten years he has been vice president and plant manager of Tudor Press, Boston. He replaces Norman Ruggles who has been named sales manager of the northeastern region.

OFFSET CRAFT, INC., has moved to 150 Lafayette St., New York 13.



NEW dampening roller...cover

CUTS dampening materials cost 50%

DISPOSABLE "DIS-COVER"™
easy as putting on stockings

The DIS-COVER is designed to collect the press ink which causes frequent changing of expensive molletons or turkish towel type dampening materials. With a DIS-COVER, molletons have run up to *thirty* weeks without washing or replacing.

DIS-COVER is easy to apply. Five minutes to slip on the roller.

DIS-COVER makes color changes easy. A new, clean cover costs less than washing a roller.

DIS-COVER prevents molleton lint from reaching the plate. Lint free.

DIS-COVER means less water — less ink emulsification—greater color brilliance.

DIS-COVER's millions of tiny pores deliver moisture evenly, regardless of the Dis-Cover's surface condition

AVAILABLE IN "PRE-CUT" SIZES, WITH DRAW CORDS, FROM DUPLICATOR THROUGH THE LARGEST 76" LITHO PRESS

Write today for full information and prices

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DIS-COVER™ is manufactured by
NORMAN A. MACK ASSOCIATES for
VAN SON

HOLLAND INK
CORPORATION OF AMERICA

MINEOLA, NEW YORK

SOLD COAST TO COAST BY LEADING SUPPLIERS



"CHAMPION" Improved Deep Etch DOWN-DRAFT Lithographers Work Table

with
VARIABLE EXHAUST CONTROLLER

4 POPULAR SIZES (Other sizes upon request)

No.	Slate Slab	Overall Dimensions (All 33½" High)	Exhaust Blower Capacity: Cu. Ft. Air Per Minute	Motor H. P.
1	30" x 40"	42" x 50"	2500	1
2	42" x 50"	54" x 62"	3200	1½
3	50" x 60"	62" x 72"	4200	1½
4	60" x 80"	72" x 92"	4800	2

Completely eliminates
ALL HAZARDOUS FUMES

Check these advantages:

- ✓ Removes all hazardous fumes at their source—no odor in shop and offices.
- ✓ Table at convenient working height.
- ✓ Exhaust slot removes contaminated air through slot all around perimeter of working area at high velocity.
- ✓ Acid resistant KOROSEAL lined disposal pitches to a KOROSEAL lined 2" drain.
- ✓ Processing of plates on an everlasting smooth surfaced slate slab.
- ✓ Large heavy duty ball-bearing type built-in suction blower operates quietly.
- ✓ Increases production.

"CHAMPION" Improved TEMPERATURE CONTROLLED Developing Sinks

- Refrigerated by hermetically sealed water-cooled condensing unit.
- Full length back splash and tray disposal trough.
- Heavy polished stainless steel, type 316, heli-arc welded.
- Fiberglass insulation.
- Storage compartment has its own thermostat.
- Attractively finished.
- 18" Double-Swivel soft flow mixing faucet services all trays.
- Expert Craftsmanship.
- Easy Access to refrigerating unit and automatic control.
- Automatic light in storage compartment.
- Service light in center compartment.
- Wash tray slides to desired location, drains into rear trough from any position.



Available with attached wash sink and negative viewer.

TEMPERATURE MAINTAINED to a FRACTION of a DEGREE

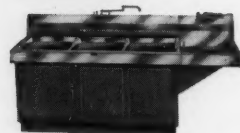
3 popular sizes	Style	Film Size	Space Req.
	No. 1	20" x 24"	32½" x 74"
	No. 2	26" x 30"	39" x 93"
	No. 3	30" x 40"	49" x 105"

CONVENIENT TRAY DUMPING

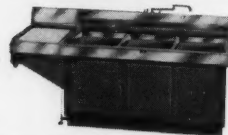
Note how easily used solution is disposed of in full length drain trough. Saves time, promotes cleanliness and eliminates hazardous carrying of trays.

RAISED DIMPLES

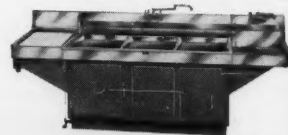
in sink bottom are provided for supporting small trays.



WITH ATTACHED WASH SINK



WITH ATTACHED NEGATIVE VIEWER



WITH WASH SINK AND VIEWER

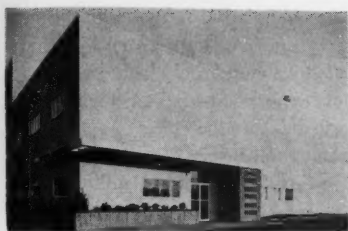
manufactured by **H. SCHMIDT & CO.**

ESTABLISHED 1891

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SEeley 3-0404





\$400,000 research laboratory recently completed by the California Ink Co., Berkeley. The building houses eight different laboratories each with a complete range of utilities including gas, vacuum, circulating hot water system, high and low pressure steam, and 110 and 220 volt power with amperage ranges up to 100. Each also has its own thermostatically controlled air circulation exhaust system.

Trusheim To Keuffel & Esser

Frank Trusheim, formerly chief of the Development and Testing Branch, Reproduction Div., Army Map Service, has joined Keuffel & Esser Co., Hoboken, N. J. He will be assigned to the technical reproduction division and will be responsible for developing work on Stabilene film products for the graphic arts.

Judges Art Contest

James Cooper, art director of the U. O. Colson Co., litho firm in downstate Paris, Ill., was one of the judges for a rural amateur artists contest conducted by the Illinois Agricultural Association. Nearly 700 paintings were entered. Some of the winners were later to be used on a lithographed calendar which the group will distribute to members for 1959.

Lyman New Sales Manager

Phil Lyman has been appointed sales manager of Wiesner & Holm Co., Milwaukee printers and lithographers. He formerly was district sales manager for American Business Forms and Bonnar Vawter companies.

Reports Net Earnings

The United States Printing & Lithograph Co., Cincinnati, reported net earnings for the nine four-week periods ended Sept. 8 of \$1,184,084, equal to \$3.42 per share of common stock. This compares with net income of \$1,139,776, or \$3.30 a common share, for the like period last year.

Directors declared a dividend of \$1.10 a share of common stock, payable Dec. 2, to make total payments

of \$2.60 for the year. Like dividends were paid in 1956. Also declared was a regular quarterly dividend of 62½ cents a share on preferred stock, payable Jan. 1, 1958.

Mayer Receives New Post

Edward N. Mayer, Jr., has been appointed executive vice president of Communications Counselors, Inc., a public relations organization affiliated with McCann-Erickson, Inc., advertising agency. He was formerly president of James Gray, Inc.

New 3M Western Sales Manager

Robert C. Wells has been promoted to Western area sales manager for the duplicating products division of Minnesota Mining & Manufacturing Co. He has been with the company since 1951.

R. R. DONNELLEY & Sons Co., 350 E. 22nd St., Chicago, is holding an exhibition of the designs, completed books, and related material of the late W. A. Dwiggins, through March.

GOLDENPLAST*

A new ORANGE masking plastic for layouts that

"HOLDS-TO-SIZE"

*GOLDENPLAST masking plastic — new formulated medium, replacing Goldenrod papers for those difficult "hard-to-register" jobs.

SEE THE DIFFERENCE!—Save Time—Save Money—today! Get GOLDENPLAST the orange masking plastic.

See the difference in features —

- Solves Misregister problems (in all climatic conditions)
- Available for all press sizes
- Easily cut
- Used for dropouts
- Thin base
- Available in rolls too

Special production method makes GOLDENPLAST available at these competitive low prices—

PRICE LIST

Sheet Size <small>All sheets cut square and packed flat at no additional charge.</small>	Quantity per Package	Price	ROLLS
20" x 27"	100	\$22.00	54" x 100 ft. \$ 25.00
24" x 27"	100	30.00	54" x 200 ft. 48.00
27½" x 30"	100	37.00	54" x 500 ft. 112.00
27" x 38"	100	41.00	
30" x 40"	100	48.00	
38½" x 54"	50	41.50	
40" x 50"	50	41.00	
42" x 54"	50	45.50	
48" x 54"	50	52.00	
54" x 60"	50	65.00	

F.O.B. N. Y., Our Plant
All Prices Subject to Change

Manufacturers to the Graphic Arts



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NEW YORK 51, N. Y.
Telephone: MOnt Haven 5-2050



ART AND COPY

(Continued from page 38)

rapher. Let us consider each briefly.

1. Tissue Overlay

The tissue overlay method is perhaps the easiest for the artist. Simply, it is a tissue over the art work with the color areas blocked in with crayon or pencil to guide the lithographer. The actual registering is accomplished by the lithographer, usually by adding the lap on his films with opaque paint. The tissue method also can be used to indicate hairline register.

2. Acetate Overlay

In the acetate overlay method, the artist draws separate art work for each color. One element is drawn on the board. The art work for the second color then is carefully drawn on frosted acetate overlay. For lap register the design always is a little larger than its background to insure a slight overlap. The rule to remember is that *the element to appear in the lighter color should overlap the darker color.*

Accurate register marks are a necessity. The cameraman photographs these as separate pieces of copy. That is the simplest and most economical way from his standpoint if the art is accurately done. The acetate overlay can also be used for loose register of color.

3. Key Line

Key Line, or "painting up," frequently is used for color work in large masses especially involving reverse

type. An outline of the color lap is drawn with a ruling pen. The area on the inside and outside of this line is filled in with black up to about 1/16" from the line. A white area remains on either side of the design line. A tissue overlay is used to indicate the colors.

The cameraman photographs this drawing twice. On one film, he finishes filling in the letters and takes out the background; on the other he fills in the background and takes out the letters. Since the line is common to each, it becomes the width of the overlap. The weight of the line depends upon the colors to be used. A set of light and dark colors can have more overlap than two light or two dark colors.

Furnishing the Overlay

As I have said, perhaps the most common and convenient method of furnishing art for color is to assemble the color elements on a frosted acetate overlay. Each color in addition to black has an individual overlay, of course.

The slight tooth of the acetate's matte surface makes it a good drawing surface that is receptive to rubber cement. The transparent quality of the overlay enables the artist to draw and position the elements accurately. Register marks are carefully traced from those placed upon the main key drawing or pasteup. These are vital for good final reproduction. Inaccurate marks or no marks at all can result in costly correction work.

Art and copy preparation is a big subject, but it is hoped that this limited discussion will provide some incentive for a review of the fundamentals of copy preparation that can result in better lithography.★

BOUND VOLUMES of MODERN LITHOGRAPHY

(Copies now available for the years 1938-1956)

Are there certain issues of **Modern Lithography** you need to complete your file? Would you like to check on past technical developments? Are there historical facts about the industry you would like to have on hand? The information is all yours in bound volumes of **Modern Lithography**.

A limited supply of bound volumes is available covering the years 1938-1956. Just mark on the coupon the year or years you desire and mail it to Modern Lithography, P.O. Box 31, Caldwell, N. J.

Prices per volume

U. S. & Canada \$14.75

Foreign \$16.50

Year: 19....

Payment Enclosed ☐

Send a Bill ☐

Modern Lithography
Box 31, Caldwell, N. J.

Name

Street

City Zone..... State.....

Bennett Wins Sales Contest

John E. Bennett, Mergenthaler Linotype Co. salesman in New York City, has been named winner of the Company's national sales contest. The prize is a trip for two to Acapulco, Mexico.

Hauck Named Ansco Manager

Warren C. Hauck, Chicago, has been named manager of Ansco's camera plant to succeed Leonard E. Ciringione who has joined the company's operations staff.

Named Polio Drive Head

Sidney W. Fenollosa, General Offset Co., Inc., has been appointed chairman of the lithographers division of the 1958 National Foundation for Infantile Paralysis campaign.

PRINTING WEEK

(Continued from Page 46)

man Edward Merkel, of Heidelberg Eastern, "that any program on a city-wide scale has reached the point of diminishing returns. In smaller communities the event has aroused much interest in printing, but Chicago," he said, "is just too big to show an appreciation of what the Craftsmen have attempted to present."

The job of arousing this great metropolitan center to a recognition of its leading industry, he remarked, is too tremendous for one or two committee chairmen to attempt with any expectation of phenomenal results, even if, as some have done, they worked six months or more. Even the city's big newspapers, he complained, have paid scant attention to Printing Week, while cooperation from banks, big industries, the schools and others has been almost non-existent.

"So we felt it was best" said Mr. Merkel, "to make this year's observation of Printing Week a strictly Craftsmen's Club function, a sort of family party, to which we invited other local graphic arts groups."

Mr. Merkel commended the job done by Harry Jones in preparing for the carnival and said all plans for the week will be closely supervised by

the Chicago club president, Edward M. Egan, of 20th Century Press, and Gordon Wilson of Harris-Seybold Co., who represented the club's board of directors.—H. H. Slawson.

Boston

Howard N. King, vice president of the Maple Press Company, York, Penna., and a past president of the International Association of Printing House Craftsmen, will conduct the Type and Design Workshop at Boston University, Boston, on Jan. 11, as a

highlight of the observance of Printing and Publishing Week, as it is known in New England.

Purpose of the workshop is to provide an opportunity to the printer to improve his typographic know-how by working with one of the nation's top typographic counselors. Mr. King is consultant for Intertype Corp.

Francis J. Tominey, of *New England Printer and Lithographer*, is general chairman of the 12th Annual observance.

On the program are a book fair,

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printing machinery show, direct-mail day luncheon, newspaper meetings, and a two-day Lithographic Workshop, sponsored by LTF. The Workshop will be held Jan. 17-18 in the John Hancock Building. — *Sidney James Paine.*

Detroit

The Litho Club of Detroit will celebrate PW January 16 in place of the regular meeting, at the Hotel Statler. Richard Hogsden will be the speaker. The club will pay \$3 of the \$6.50 dinner for each member wishing to attend.

Cleveland

The 6th annual observance of Printing Week is being sponsored by all the Cleveland graphic arts groups, the local newspapers, and the Cleveland Public Schools.

The school system is attempting to encourage more young people to make a career in the graphic arts field. Better understanding and fuller cooperation too is sought between trade and graphic arts groups.

The annual Printing Week Banquet will be held Jan. 15 at the Mid-Day Club. Governor William O'Neil of Ohio and Mayor Anthony J. Celebrezze of Cleveland will be in attendance along with a guest speaker. The annual Ben Franklin Ball will be held on Saturday evening, Jan. 18.

Each year, the Cleveland Graphic Arts Council, through Printing Week, offers a scholarship of \$750 to an outstanding printing student in Cleveland. This scholarship is awarded on the basis of scholastic ability, printing aptitude and the winner's interest in printing as his life work. The scholarship winner will attend the Rochester Institute of Technology, School of Printing.

There are two additional scholarships proposed for Cleveland daily papers; one of them based on sayings in "Poor Richard's Almanac" and the other based on photo identification of Graphic Arts scenes. There is a proposal also to run a third contest for the best or poorest ad in a daily newspaper.

In addition, a medal award is given

to some outstanding student of printing in each of the Cleveland High Schools.

The Litho Club of Cleveland will present a Citation of Merit to the most outstanding litho student in the Cleveland high schools.

There will be a special edition by the local newspapers, honoring Printing Week, and radio and television programs are being planned.—*Paul J. Ullmann.*

Cincinnati

A somewhat different approach to the annual observance is being undertaken this year. Efforts will include frequent stories in the local newspapers, attractive displays of posters and different types of printing in windows of a large number of stores and banks in both downtown and suburban shopping centers, as well as in sports arenas and other places where people congregate in large numbers. Announcers at the arenas and halls have been provided with brief copy calling attention to the displays.

All of the city's TV and radio stations have been provided with appropriate 10-second and one-minute announcements for reading during station breaks; while TV stations also will have slides for use at program breaks.

Posters and stamps for attaching to outgoing mail have been provided all graphic arts associations in the city, for distribution to their member firms.

As usual, the Printing Week program is being arranged by a committee of the Cincinnati Club of Printing House Craftsmen. This year's committee is headed by Walter C. Deye, executive vice president of Quality Engraving & Electrotype Co. Other committee members are Kevin Kelley, printing ink division, Interchemical Corp.; Benjamin Woerman, Cincinnati ATF Type Sales Co., and Ora Smith, printing instructor, Central Vocational High School.—*Edgar C. Hanford.*

Los Angeles

Radio and television appearances by leading graphic arts representa-

tives and speeches at Southland service clubs, the crowning of "Miss Etaoin" and "Miss Shrdlu," and the presentation of awards to deserving young students in the field of graphic arts, get top billing on the local program.

Highlight of the week will be the banquet, which will be held this year at the Beverly Hilton Hotel on Jan. 17, Franklin's birthday.

Chairman of the PW committee is Gordon Matson, president of Modern Typesetting Co., and longtime participant in the annual Printing Week observances.★

KIPE OFFSET

(Continued from Page 102)

machines.

Among those at the dinner who were honored for long service, and awarded tie clip emblems were Howard Lambert, salesman, 25 years; Irma Nymark, secretary-treasurer, 25 years; Howard Wagner, 23 years; Joseph Bauer, night supervisor, 22 years; James DeVries, 21 years; William Armstrong, 21 years; Joseph Shiller, 21 years; John Sandner, 18 years; Charles Simunek, 18 years; Francis Wroblewski, 16 years; August Storck, 16 years; and Milton Grouleff, 15 years.★

TECHNICAL BRIEFS

(Continued from Page 57)

lations using a variety of assumed sensitivity distributions, it is concluded that there is no unique set of sensitivity distributions which, when used with a given set of dyes, will lead to a minimum of color-reproduction errors.

Planographic Printing Processes

*PRINTING PLATE. British Patent 767, 074, appl. 11 Mar. 1955. Creed & Co., Ltd. *Pat. Abstr. J.*, No. 3538, 30 Jan. 1957, p. 20; *Printing Abstracts*, vol. 12, No. 4, April 1957, page 221. An electrically inscribable lithographic offset printing plate having an adherent conductive ink-receptive layer of carbon particles held by an elastomeric binder and a thin adherent surface coating comprising a pigment dispersed in a hydrophilic, water-insoluble binder for receiving an ink-repellent solution and preventing ink transfer to the background area of the inscribed printing

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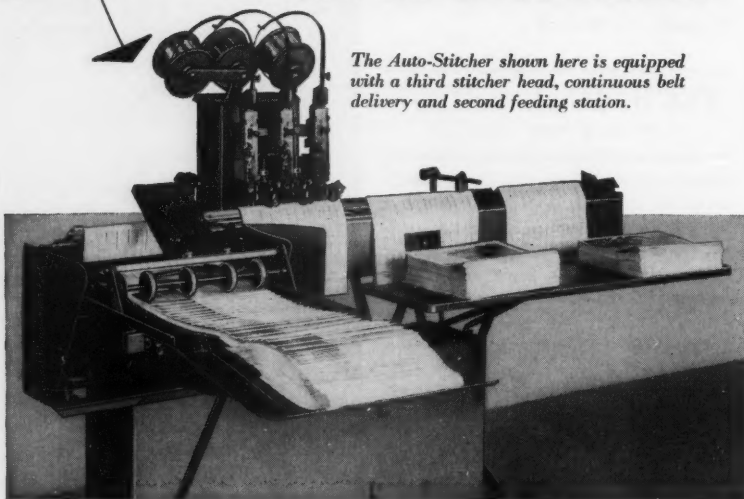
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plate, which coating is disintegrated when subjected to electrical marking currents to expose the underlying ink-receptive layer.

*PRINTING PLATES. U. S. Patent 2,732,796—Filed May 17, 1951. C. H. Van Dusen Jr. — Assigned to Addressograph Multi-graph Corp. *Monthly Abstract Bulletin*, vol. 43, No. 4, April, 1957, page 194. A grained zinc or aluminum lithographic printing plate is treated, before sensitizing, with a water solution containing 0.1 to 5.0 percent by weight of a soluble alkali silicate, e.g., sodium silicate, then rinsed with water, and dried. The thin, water-insoluble silicate film makes the plate more strongly hydrophilic and reduces the tendency to scum in printing, or to corrode in storage.

Paper and Ink

*A NOVEL INKING METHOD BEING DEVELOPED. ANON. *Printers' News*, Auckland, vol. 15, No. 1, Feb. 1957, p. 7, *Printing Abstracts*, vol. 12, No. 5, May 1957, page 309. The process, which is still in the development state, consists in distributing a special ink on a hot printing plate. The heat of the plate drives off any solvents, and causes the ink to dry on the printing plate before impression. As the hot plate comes in contact with the paper, the ink is transferred to the paper in a dry state. Ink is completely transferred to the paper, with no ink residue left on the plate, which is freshly inked for each impression.

*EFFECT OF RELATIVE HUMIDITY OF THE AIR ON GLOSS OF PAPER. H. Trogas. *Paper Mkr.*, Lond., Mid-Summer No. 1956, pp. 34, 38; *J. Appl. Chem.*, vol. 7, No. 3, Mar. 1957, col. i-221; *Printing Abstracts*, vol. 12, No. 5, May 1957, page 272. Measurements on nine different writing and printing papers conditioned at various R.H. showed that gloss values were little affected at low humidities but decreased at higher humidities, i.e., above 65 per cent or even 55 per cent in the case of high-gloss papers.

A NEW PRINTING TESTER. *Southern Pulp and Paper Manufacturer* 20, No. 8, August 1957, p. 32 (1 page). A new printing tester was developed so that with little technical skill it is possible to determine rapidly, conveniently and numerically, the inter-relationship between printing ink and paper. This instrument manufactured by Karl Frank G.m.b.H., of Weinheim-Birkenau, Western Germany, will test properties for both letterpress and offset printing using printing blocks either solids or different screens transferring the image to foil, paper, rubber blocks or offset rubber blankets. The speed of printing can be varied as well as printing pressures.

*A NEW MOISTURE METER. ANON. *World's Pap. Tr. Rev.*, vol. 147, No. 13, 28 Mar. 1957, p. 1024; *Printing Abstracts*, vol. 12, No. 5, May 1957, page 269. The meter developed by Mr. W. Gallay of the E. B. Eddy Co. operates on the principle

of measuring the electrical resistance of the paper between two electrodes spaced on the same side of the sheet. An alternating current is used, which is said to obviate the problems of non-uniform contact pressure and static. In a range of moisture contents from 3 per cent to 10 per cent an operating accuracy of ± 0.2 per cent has been obtained.

MORE PAPER FOR YOUR MONEY. C. V. Morris. *Printing Magazine* 81, No. 8, August 1957, pp. 38, 39, 40, 74, 75 (5 pages). Review of paper developments and general comparisons with "old materials." Paper-makers investing over one billion dollars in improvements and installations for period 1956-58. Chemicals are improved—use of CaCO_3 , cited as well as water treatment and use of optical bleaching agents giving Spectro-photometer readings of 88 to 89. Refinements in process equipment, leading to cleaner products give higher quality paper. Extra refining machines which result in additional cutting and hydrating of fibers give many advantages. Notes decrease in complaints due to RH maladjustment. Increased opacity results in ability to reduce weight of stock purchased by 5 lbs. in many cases. Notes increase in offset so that trend in sizing is toward harder finishes. Variation in caliper thickness is being lessened by "Beta Gauge" or "Accuracy" controls on paper machines. "Pigmentizing" with clay, and starch-pigment with formaldehyde resins improve printability and dimensional stability. Improved pulp qualities lead to less fuzzing and linting. Cites use of root starches for sizing, especially potato starch. Modern sheeters run 600'/min. compared to 250'/min. for older machines. Better pulp blending results in superior strength. Many offset grades made with sulphate fibres for better tear strength. Waterproof packaging of papers protects mill-goodness of papers. Other advantages in refinements in packaging cited. Electronic counting of sheets increases accuracy and assures full count.

Lithography—General

ALUMINUM FOIL . . . LAMINATING, COATING, PRINTING. James T. Truesdale. *Share Your Knowledge Review*, vol. 38, No. 11, August 1957, pp. 11-16, 6 pages. A comprehensive discussion including data based upon research development and manufacturing as well as the special printing problems which are involved. Lithography is recently entering this field although all of the problems have not as yet been worked out. Some of these problems are based upon the poor drying of moisture and of inks which has led to a study of the use of auxiliary drying equipment. A thorough discussion covers the problems which arise in printing upon aluminum foil by each of the reproduction processes.

QUALITY CONTROL — USE OF INSTRUMENTS, PART 18. Charles W. Latham. *American Printer & Lithographer*, vol. 138,

No. 9, September 1957, pp. 30, 31, 34, 36, 4 pages. The various instruments and measurements which can be employed to eliminate guesswork from lithography are discussed. This discussion includes considerations of the relative importance and practicality of each type under various circumstances.

ANALYSIS OF OFFSET AND RELIEF DUPLICATORS. *Offset Duplicator Review*, Part II, October 1957, 11 x 15 chart—4 pages. A detailed chart of specifications for 23 duplicators and small offset presses. The chart includes manufacturers recommendations as to the use of their models for line, halftone, solids, color registration, dry offset, hand type, linotype, rubber plates and electrotypes.

Graphic Arts—General

HICKETHIER COLOUR SYSTEM. *Printing World*, vol. 160, No. 13, March 27, 1957, page 312. This is a book which includes and explains the Hickethier color chart. This is a three color printing of ten halftone steps giving 1,000 different colors numbered to indicate their components. A German version was printed in 1952. The new English edition is obtainable from Stonhill and Gillis Ltd., 296 High Holborn, London WC1; price £4.

PROBLEMS OF PRINTABILITY. Dr. E. Rupp. *Archives for Printing, Paper and Kindred Trades*, No. 2, 1955, pp. 166-174 (9 pages). This article gives factors that determine printability and defines them. The paper properties mentioned are smoothness, elasto-plasticity, homogeneity, deformation, fluffing, opacity, and picking. The printability tester developed by Leipzig Institute of Graphic Technics is presented. Interesting graphs given are (1) per cent ink transfer vs. ink carried on letterpress plate for various papers, (2) per cent ink left on plate, blanket, and paper vs. press revolutions for offset.★

PLATEMAKING

(Continued from Page 42)

water lines which not only will prevent dirt from reaching the plate but will also deionize it so that its chemical composition is uniform. To check register we have the LTF Register Rule, or we can make our own templates or use the lineup table. Each of these devices, if properly maintained and used, will control one or more variables in the platemaking operation.

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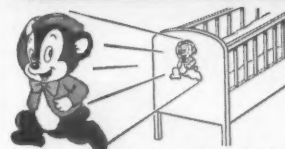


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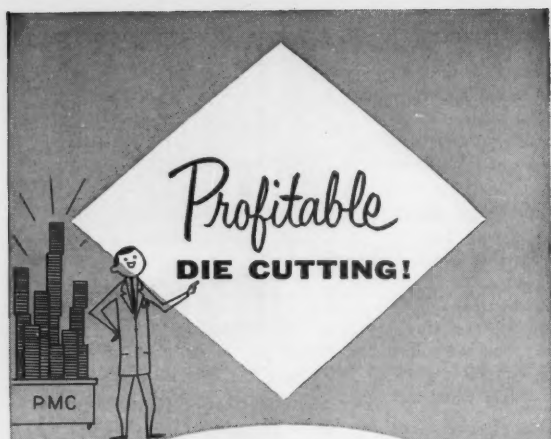
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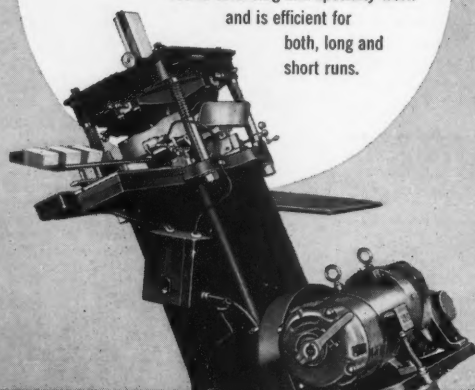
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MODERN LITHOGRAPHY, January, 1958

an excellent bulletin on it (LTF Research Bulletin No. 15, Lithographic Technical Foundation, 131 E. 39th St., New York), also has included a section on it in all of its recent platemaking manuals. You can buy a Sensitivity Guide from almost any supplier for \$2.50. You would think that no plateroom would be without one and that every platemaker would know how to use it. Unfortunately such is not the case so here is a brief description of it.

Basically the Guide is a continuous tone gray scale. Each step on the scale is .15 higher than the preceding one. In all there are 21 steps in the scale. Now, exposure is defined as the intensity of the light multiplied by the length of time it is allowed to operate. Since each step in the scale varies the intensity of the light, the coating underneath the guide receives 21 different exposures regardless of length of exposure.

When the plate is subsequently developed we have an index as to the sensitivity of the coating, *provided each plate is developed in exactly the same manner*. If you use a solution of one ounce of ammonia per gallon of water to develop one surface plate and use a solution of three ounces per gallon on the next we can get a change in the Guide which is not necessarily related to coating sensitivity. Or if we rub hard one time and easy the next, the same effect will be noted. This applies to surface plates and presensitized plates as well.

In deep-etch work you will get a difference if you use different developers or if you allow the same developer to operate for longer or shorter periods. Employed in a quality control system, you would first determine the correct exposure for the type of plate and negatives or positives being used. This can be read as a definite step number on the scale, although in actual practice a one- or two-step tolerance is permissible.

Then, by using a constant developing technique, you should always get approximately the same step. A large deviation from this standard indicates that something has gone wrong and corrective measures can be taken. For

instance, let us assume that when making surface plates you obtain the best tone reproduction when the scale reads step No. 6. If on a certain plate you get step No. 3 you will know that for some reason the coating has become less sensitive.

This can mean several things:

- a. The pH of the coating may have been too high;
 - b. The light intensity may have dropped;
 - c. The relative humidity may be too low; or
 - d. The coating may be on too thick.
- The excessive thickness of the coating can be caused by too heavy a Baumé, too slow a whirler speed or too high a temperature on the plate or in the whirler at the time of coating.

By a process of elimination and the judicious use of other control devices you can locate the trouble and correct it.

In deep-etch work and on poly-metallic plates, use of the guide can save a plate which has been improperly exposed. If it has been underexposed, the guide will develop more rapidly then it should and development can be stopped. If it has been overexposed, it will develop more slowly and it can be forced to get the desired step. However, I want to stress again that this works only within limits and is not good quality control practice. I would certainly try to save a plate by this method but I would take corrective measures on the next one to insure that the plate would develop in the standard manner.

The Guide can also be used to standardize dot size on the plate when camera positives or negatives are employed. Again this will work only within limits, and presupposes that the photographer always furnishes the same type of dot. This is quite a presumption and the best practice in deep-etch work is to furnish the platemaker with contact positives.

The Guide has several other uses in control work. These are very well covered in the LTF Bulletin referred to above.

Conclusion

In the course of this article I have stressed the need for standardization

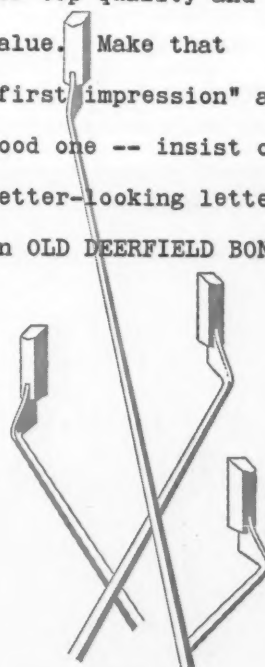
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in any sound quality control program. By this I do not want to imply that we should remain static. We should be examining new methods and materials as they become available in the light of our requirements. Should something develop which is better than what we are using, it should, of course, be adopted. That, strictly speaking, is a function of a research and development branch and not a function of quality control.

Since most litho shops are not large enough to support a research staff, this function must be integrated into the functions of operating personnel. The investigation, however, should be carried out in a scientific manner and changes made when benefits are obvious and not because the new salesman uses a better brand of whiskey or can furnish football tickets nearer the 50-yard line.

Very little of what I have written is new. Most of it can be found in standard management texts or in lithographic technical publications. Quality control is a separate problem in each plant and the degree of quality control you exercise will depend upon your own individual requirements.

I do know that systematic control of the variables in platemaking is possible. It is also certain that, whatever your requirements are, some degree of control is necessary if you are to compete in today's market. Without exception, plants using even the most rudimentary form of quality control have found that it pays off in lower costs and higher profits.

Why don't you give it a try?★

Bibliography

- Bowker, Albert H., and Henry P. Goode: *SAMPLING INSPECTION BY VARIABLES*, New York: McGraw-Hill Book Company, Inc., 1952.
- Dodge, Harold F., and Harry G. Romig: *SAMPLING INSPECTION TABLES*, New York: John Wiley & Sons, Inc., 1944.
- Duncan, Acheson J., *QUALITY CONTROL AND INDUSTRIAL STATISTICS*, Homewood, Ill.: Richard D. Irwin, Inc., 1952.
- Enrick, Norbert L.: *QUALITY CONTROL*, 2d ed., New York: The Industrial Press, 1954.
- Feigenbaum, A. V.: *QUALITY CONTROL: PRINCIPLES, PRACTICE, AND ADMINISTRATION*, New York: McGraw-Hill Book Company, Inc., 1951.
- Grant, Eugene L.: *STATISTICAL QUALITY*

CONTROL, 2d ed., New York: McGraw-Hill Book Company, Inc., 1952.

Hald, A.: *STATISTICAL THEORY WITH ENGINEERING APPLICATIONS*, New York: John Wiley & Sons, Inc., 1952.

Heide, John D.: *INDUSTRIAL PROCESS CONTROL BY STATISTICAL METHODS*, New York: McGraw-Hill Book Company, Inc., 1952.

Juran, J. M. (Editor-in-chief): *QUALITY CONTROL HANDBOOK*, New York: McGraw-Hill Book Company, Inc., 1951.

U. S. Department of Defense, Munitions Board Standards Agency, *SAMPLING PROCEDURES AND TABLES FOR INSPECTION BY ATTRIBUTES* (booklet), Washington, D. C., 1950.

Bethel, Atwater, Smith, Stackman, *INDUSTRIAL ORGANIZATION AND MANAGEMENT*, 3d edition; Chapter 15, pages 317-343.

PRODUCTION CLINIC

(Continued from Page 72)


for the gripper edge is either concave or convex. If the paper can be turned so that it will be either one or the other, the individual stops on the press can be set to conform with the contour of the sheets. This will eliminate distortion of the sheet from the beginning, and consequently when

printing the second series of colors the stops can be moved to compensate for whatever stretch has occurred in printing the first colors.

Fanning Out

When stock shows a tendency to fan out and the sheets have to pass through the press from four to six times, regulating the stops from the start of the job may help. This is an intricate procedure and must be done with very thin "shims" or pieces of paper. Starting from the center and working toward both ends of the press, each stop should be shimmed slightly more than the next one to give the sheet a concave edge when laid in the grippers. This will make the image print short across the back edge of the sheet, and if the paper should fan out it can be brought in again simply by setting the stops back to the cylinder edge. Then if the paper should fan out still more on succeeding colors, the stops may be underlaid or shimmed in the reverse or convex manner.

To sum up, I would say that very

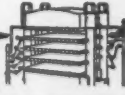


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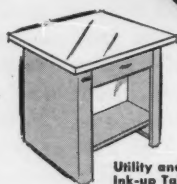
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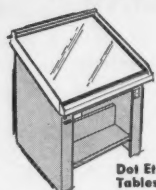
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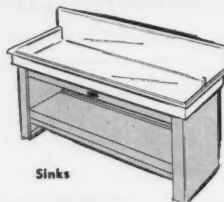
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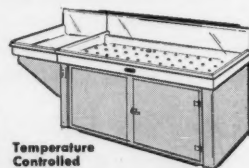
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little distortion or fanning out will occur in printing if all the stops on the cylinder touch the sheet with the same tension.

Three-Point Register

On presses with three-point register systems this problem must be approached in a different manner. Since there are only two points of register on the gripper edge of the sheet, the squaring of the sheet is less important. It is, however, very important that the sheet lie perfectly flat on the feeder delivery when the grippers on the press cylinder close and take the sheet.

The slightest bulge or distortion at this time will cause misregister of some portion of the sheet. On presses where the feeder tapes are suspended over a large area the mere flapping or chatter of the tapes along the back edge of the sheet can cause fanning or misregister, to some extent. Here, again, the image takes form on the sheet of paper according to its position when placed into the guides and grippers. All adjustments should be taken care of at the start of the job, for any changes made between the printing of colors may cause misregister.

To compensate for any fanning out it is necessary on three-point guide presses, to "bustle" the sheet by raising the back edge of the sheet in the center, on the feed board. As the sheet lies in the guide at the time the cylinder grippers close, the bustle at the back edge causes the front or gripper edge to form an arc, which is convex. The result is the same as when the stops are underlaid on presses without three-point register.★

ENCYCLOPEDIAS

(Continued from Page 35)

are done on Mead paper.

As in the Americana set, text type has been enlarged in the Britannica, to 9 pt. on 10 pt. Linotype Old Style No. 7. Trim size of the book remains unchanged, at 8½ x 10⅞". There are several bindings of the set.

A Britannica spokesman said the conversion was made for reasons of "quality, increased flexibility (includ-

ing allowance for many more half-tones in the text pages), and, of course, economy."

Other Conversions

ML learned last month that Compton's Encyclopedia also is converting from letterpress to offset. In addition, the Sears, Roebuck set, American Peoples Encyclopedia, has been produced entirely by offset (but not web-fed) since its inception in 1948 (See ML, January, 1949, page 33). It is published by the Spencer Press, Inc., Chicago. The 20-volume set is printed on Harris Seybold and Miehle sheet-fed presses, size 42 x 58". Biggest portion of the run is handled by Newman Rudolph Lithographing Co. in Chicago.

A notable holdout for letterpress, however, is one of the biggest sellers — World Book, which still uses letterpress, except for a 20-page full color insert on birds. R. R. Donnelley & Sons, Crawfordsville, Ind. prints the sets on Cottrell and Claybourn rotary presses.

In light of the favorable comments from Americana, Britannica, and the others, however, it would not be surprising if World Book, too, were to make the big switch to web-offset that has come so quickly and completely to a field that some persons have quite mistakenly regarded in the past as staid and unprogressive.★

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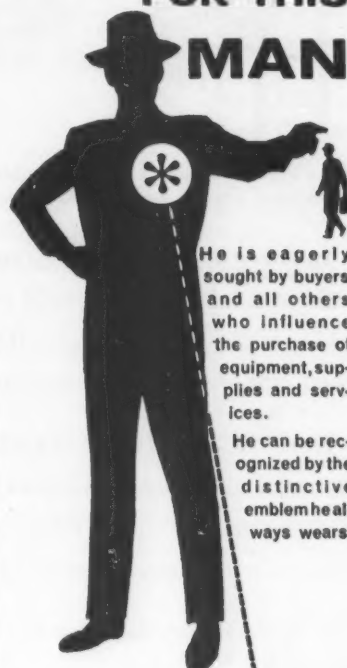
(Continued from Page 60)

by a treatment of color and light, color mixtures and color notation. Having thus established the fundamentals, the book then takes up subjects more directly concerned with printing. The composition and characteristics of inks, the colorants used, how inks are modified, color fastness, the inks used in two-, three-, and multi-color printing, etc., are reviewed.

The text concludes with an explanation of the eight color charts provided separately. This book treats a very broad field very concisely and can be considered no more than an authoritative orientation and introduction to the subject.★

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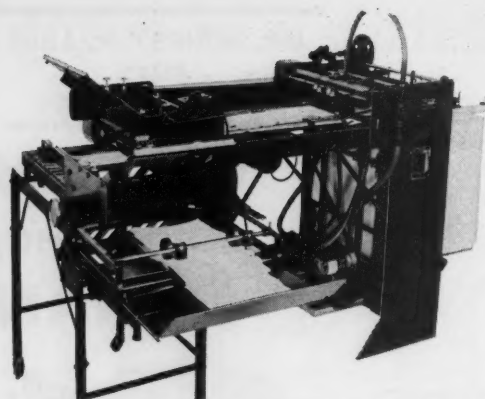
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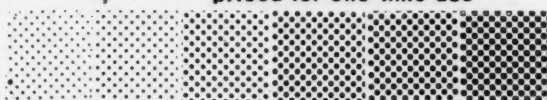
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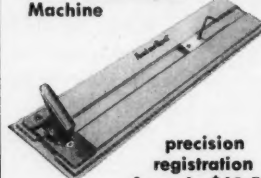
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More than 600 lithographic craftsmen and graphic arts executives from Connecticut, Massachusetts, Rhode Island and Vermont attended the first New England Lithographic Technical Forum at Hamden, Conn., Nov. 29, 30. The forum was the first in the United States to use the filmed version of LTF closed circuit television programs.

Sponsored by the Graphic Arts Association of Connecticut and Printing Industry of Connecticut, the program included the latest technical information on making halftones, paper and ink troubles, surface and deep-etch platemaking, light and color, bi-metal and presensitized plates, plate handling and others. Six color films were presented, augmented with talks and demonstrations by Michael H. Bruno and Frank Preucil, of the Lithographic Technical Foundation.

Mr. Bruno presented his "Crystal Ball" talk which covered recent developments in lithography and the research activities of LTF. In predicting what present research is leading to he commented that "the days of grain and counter-etch are numbered and pre-coated plates are going to be the thing in the future." He also said that "a great deal of work is being done with respect to dampening and the industry will see changes in dampening systems in the not-too-distant future."

A consensus of opinion taken after the forum indicated that a majority thought it to be the most valuable graphic arts education program they had ever participated in.

Gill To Adv. Post

Monroe W. Gill has been named manager of advertising and sales promotion for Eastern Corp., Bangor, Me. He was formerly in charge of the company's national advertising program.

Appoints New Representative

Magill-Weinsheimer Co., Chicago, has appointed the W. J. Smith Co., as its sales representatives in the Louisville, Ky., and Evansville, Ind., areas.

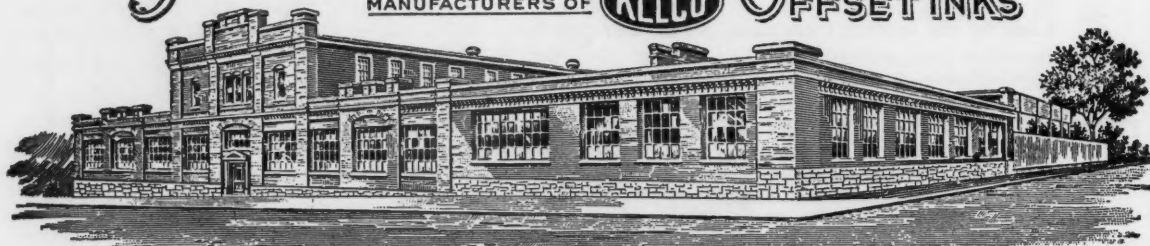
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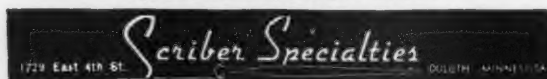
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Ives Opens New Plant

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New Post For Berman

Malcolm Berman has been appointed vice president and general manager of Consolidated Printing & Publishing Corp., Jamaica Plain, Mass.

Robertson Folder Available

A six-page process color folder describing the new series of Robertson overhead Tri-Color cameras is now available from Robertson Photo-Mechanix, Inc., 7440 Lawrence Ave., Chicago 31.

The folder, OH-102, illustrates and describes the various models and accessories available with the 31, 41 and 48" cameras. Complete specifications covering sizes, ranges, weights and dimensions are also listed.

Magazine Honors Mueller

An auto-biographical sketch by William Mueller, marking his 25th year as an offset pressman with Western Printing & Lithographing Co., was featured in the November issue of *The Westerner*, the company's magazine.

Entitled "This Is My Job," the article is a comprehensive view of the lithographic process as seen by a pressman and his three-man crew.

Mr. Mueller discusses the skill that goes into the makeready process and the teamwork involved in producing a four-color job. He described each job as a challenge and said that a good pressman should never stop adding to his knowledge of his craft.

Has Lighting Talk by Meeker

The guest speaker at the Fall meeting of the Rochester Litho Club was Robert E. Meeker, sales manager, Macbeth Corp., Newburgh, N. Y.

Mr. Meeker spoke on "Standardized Illumination for Viewing in the Graphic Arts." He pointed out the importance of having the customer, art director, platemaker and printer view the original and printed results under the same illumination and the difficulties that can result when each of these use a different light source.

He advised his listeners that the Research and Engineering Council of the Graphic Arts and the Illuminating Engineering Society have published a standard method of viewing to solve this problem.

Mr. Meeker illustrated his talk by using a cabinet with several different light sources to show how colors vary under dissimilar lighting.

Dayton Forms 3 New Regions

The Dayton Rubber Co. has formed three new regions in its Dayco Roller division. J. H. Shaw has been named sales manager for the new central region; N. A. Ruggles for the Northeastern region; and J. A. Bollmer for the Southeastern region. Headquarters for the three men will be Detroit, Boston and Atlanta, respectively.

Produces New Candy Package

New four-color packages for M. J. Holloway Co.'s Milk Duds, chocolate covered caramels, have been created by The Lord Baltimore Press.

Lithographed by Fidel-I-Tone, a Lord Baltimore process, the packages use reds, yellows and browns against a white background.

While basically the same design, the larger, a 9 oz. package, has a cellophane window on the front panel and part of the side. The other container has the same artwork on both front and back.

Southern GAA To Meet In May

The 37th annual convention of the Southern Graphic Arts Association and 19th annual exhibit of southern printing will be held next May 19-21 at the Brown Hotel in Louisville. Harold W. Braun, president of the Fetter Printing Co. and Louisville Graphic Arts Association, will serve as general chairman of the meeting.

Opens New Offices In Ga.

The Lawson and Miehle Company divisions of Miehle-Goss-Dexter, Inc., observed the opening of their Atlanta offices and showrooms, 595 Wimbledon Road, N.E., with an open house for the Southeastern graphic arts industry. Company products were displayed and demonstrated.

First Coated Cover Stock

Kimberly-Clark Corp., Neenah, Wis., is introducing its first coated cover stock, Prentice Coated Cover, this month. It is available in cover weights of 60, 80 and 100 pounds in a variety of sizes.

WHY?

... Why fight over ML every month when you can have an extra copy for shop or home just by sitting down right now and sending us your order.

One Year \$3

Two Years \$5

MODERN LITHOGRAPHY

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Caldwell, N. J.

Modern Lithography

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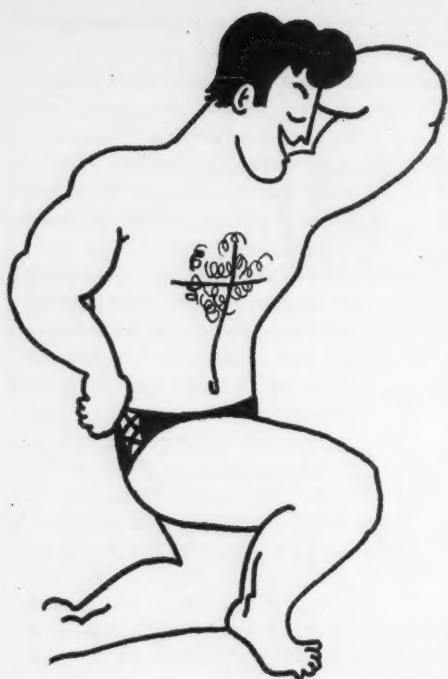
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DON'T ABUSE YOUR BUDGET!

One way an advertising space buyer in the litho field abuses his budget is to cut it up in little pieces and scatter it around in every magazine that has the word "lithography" vaguely connected with it. (You can't hit he-man hard anywhere with small creampuff shots.) Or the advertising buyer gets on the right track and concentrates in one magazine,—but picks the wrong magazine!

concentrates in one magazine,—but picks the wrong magazine!

MY METHOD—DYNAMIC SPACE BUYING!

Pick the one powerful red-blooded magazine in the field — and concentrate your advertising there — where the customers who really count will read your sales messages month after month after month. Repeat calls get the business. And the powerful, red-blooded magazine is easy to judge. Just make a check chart on all the points by which two magazines can be compared:

1. Most Editorial material
2. Most ABC paid circulation
3. Most Advertising Acceptance
4. Most Readership
5. Lowest Cost Coverage
6. PRESTIGE

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In the strongest book—MODERN LITHOGRAPHY!

Mail this coupon NOW!
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of only \$170 per month)



• A. B. of Two Dot, Mont.,
writes: "I added 4 1/4 inches
to my wallet with a concentrated
schedule in Modern
Lithography."



• C. D. of Black Wolf, Neb.,
writes: I increased my order
department by 2,000 square
feet in only 3 months with
Modern Lithography."



• E. F. of Peapack, N. J.,
writes: "A. B. and C. D. are
pikers!"



MODERN LITHOGRAPHY Leader in the Litho Field Caldwell, New Jersey

- ☐ Please rush information on the market and the magazine!
- ☐ Please rush rate card and contract blank!
- ☐ Please rush salesman!

Name

Company

Address

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TALE ENDS

IT'S a pity that a man needs only one calendar, because each Christmas brings nearly a dozen from lithographers and suppliers in all parts of the country; each one is so striking that it is always a difficult job choosing the one best.

This year we have on our desk a handsome calendar from Ketterlinus Lithographic Manufacturing Co., Primos, Pa. featuring a scene in the Latin Quarter of Paris. The print is so good (it's by Edgar Claudel) that one could wish for an additional sheet for framing, and Ketterlinus, anticipating that desire, has enclosed one!

From Raleigh Lithograph Co., New York, we received a plastic bound calendar with board covers. Inside, a single country scene is varied each month to show the changing seasons.

The usual plethora of Christmas cards is with us too. Among them is a surprising card from Ideal Roller & Mfg. Co., abandoning the familiar country print shop theme for a modern drawing of Santa in the print shop. Reason for the change is that Ideal believes there are few of the real old-timers around who get a kick out of the nostalgic scenes.

From Curtis Paper Co. comes one of the handsomest gifts of the season, which has the whole office fighting for possession. It is a portfolio containing two antique maps, printed in eight colors by offset lithography. The high degree of fidelity was achieved through the use of two tint colors to reproduce the antique paper background.

And from Haddam, Conn. come Christmas greetings from one of the grand old men of the lithographic industry, Clarence W. Dickinson, who has lived to see many of his "ridiculous" predictions of years ago become commonplace realities in our industry. "Dick" recalls that he sold the first

five automatic offset presses for Harris 50 years ago, before many of us were born. Later he served many years with R. Hoe & Co. A very spry 82, "Dick" is living in quiet retirement with his wife, Bertha. His address is Box 42, Haddam, Conn.

Offset-lithography received a down-to-earth tribute in Boston during the

Christmas holidays. A colorful crosswalk made entirely of Christmas greeting cards was laid across Washington street from Summer to Winter street by the Rust Craft Greeting Card Co., Dedham, Mass.

Phones will be ringing in New York, Detroit and Dallas simultaneously sometime between 2 and 3 p.m. Saturday, Jan. 25. When the three receivers are picked up, virtually every Litho Club in the country will be in communication with each other. The occasion will be three concurrent meetings of the council of administration of the National Association of Litho Clubs. President Len Starkey hopes the experiment will help give the clubs a greater *esprit de corps* for the afternoon.

You Have to Concentrate If You Want Real Results



YEP, no matter what you're after in the way of real results—CONCENTRATION is the only way to get it. And, if you want real advertising results, pick the one strong magazine in your field and concentrate your advertising there—where the people who really count will read your sales message month after month. In the litho field, strongest magazine is, of course,

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